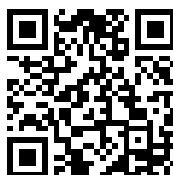

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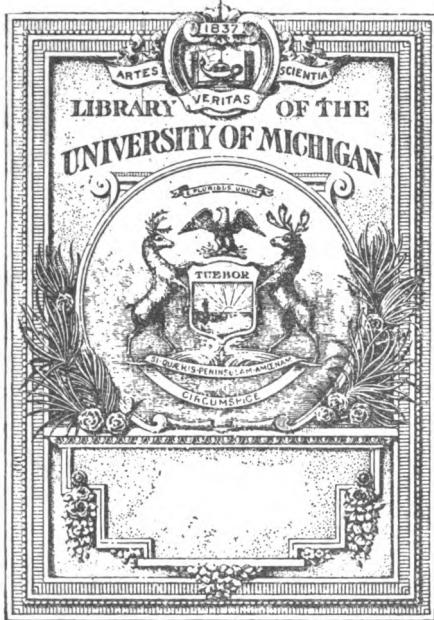
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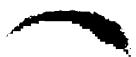
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DESIRE AND REASON



Desire and Reason

BEING AN ACCOUNT OF THE ORIGIN
AND DEVELOPMENT OF
INTELLECTUAL PRINCIPLES



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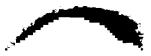
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CONTENTS

	PAGE
INTRODUCTION	1
INTRODUCTION TO PART I :	
THE SOUL'S ORIGINAL OBJECT	5
PART I :	
THE SOUL AND ITS IMPRESSIONS	25
INTRODUCTION TO PART II :	
THE <i>a priori</i> DEFINITION OF NATURAL BEING	73
PART II :	
THE SOUL AND NATURE	85
INTRODUCTION TO PART III :	
THE <i>a priori</i> DEFINITION OF SPIRIT	165
PART III :	
THE SOUL AND SPIRIT	177
PART IV :	
THE SOUL AND GOD	207

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INTRODUCTION

1. It seems desirable for a philosopher to introduce his thoughts with some account of what he supposes philosophy to be. Philosophy having been studied for so long, it might be anticipated that there existed among philosophers a general agreement at least as to its purpose. But particularly in our own time the definition of philosophy appears doubtful ; so much so that to be called a *philosopher* seems to imply nothing in particular.

Philosophy seems to me to be the attempt to discover in things a *necessary* existence :—and by this I mean one required by the *mind*. It is none of the mind's *original* claims to *require* much, or perhaps anything. At first the mind recognises, without understanding, things ; it does not suppose itself to have any power over them ; little or nothing seems to it necessary, and only *chance* speaks to it of a world strange, and for all it can say, absurd and unintelligible. Philosophy is in these conditions evidently impossible. But such conditions are also what tend to awaken philosophy :—they reveal the mind to itself ; oppose it to chance ; and make it sensible of a capacity to *require* the existence of some things, and to *deny* the possibility of others.

2. It is, I think, convictions thus arising which, in the form of intellectual principles, constitute those *assumptions* from which philosophy springs. Some assumption, it is certain, every philosopher must make. And the nature of that assumption is the first thing which he has to determine. That the *mind* from which such assumptions

arise, and by which they are alone supported, must be assumed, seems evident; for what is it but the mind's satisfaction, through their means, at which any philosophy can aim? As for *other* things—inasmuch as these are what trouble the awakening mind, inasmuch as it is these which it aspires to make *necessary* :—to *assume* these must be impossible, as leaving the mind no better off than it was when subject to chance (sect. 1). To *such* things I shall give, in what follows, the common name of *experience*, in order to distinguish them from the mind's assumptions, which may be termed, rather, *principles*, *conceptions*, or *categories*.

3. To distinguish thus between what *is*, and what is *not*, to be assumed, I take to be the first need of philosophy. But this distinction involves consequences which ought the more to be mentioned, that many philosophers will little agree with them. For consider these consequences: The mind is, by hypothesis, to assume only itself and, holding solely to its own principles, to *require* through them all other things :—it follows the mind must *consider itself*, and moreover be in fact, competent to *deduce* from its own nature the varied forms of its knowledge—to re-produce, in a word, what *chance* seems to offer it ready-made (sect. 1). That the mind is a nature capable of thus leaving aside its experience—of retiring, as it were, into itself, and of then *requiring*, or showing to be *necessary*, that which it finds about it,—this will no doubt seem to some a very extravagant supposition.

4. I am however the more convinced of the possibility, nay, of the necessity of this, when I consider what follows, when any other division is made between what is, and what is not, to be assumed by philosophy. That any different division introduces an inevitable inconsistency into philosophy, however philosophy be regarded, seems to me not

open to question. The inconsistency is, I conceive, of two general kinds :—in brief, if something *other* than the mind be assumed, the system is involved in contradiction : if something in *addition* thereto be so, it is involved in scepticism. For to take the *first* :—Suppose the thinker has assumed God or Nature : his *mind* then conceiving itself a part of *experience* must desire to deduce *itself* from that assumed principle ; but it cannot do this, for that principle itself must necessarily *depend on* his *mind*. Thus Spinoza (to take an example) could not, without contradiction, deduce *his own* *mind* (with all that that involved) from the Infinite Substance whence he might hope to deduce all other things. As subject to this contradiction are those philosophers who, in our own and other times, have first assumed some attribute or stuff of *Nature*, and deduced their own minds from it.

5. Again, take the *second* inconsistency, and suppose something *beside* the mind to be assumed : as God, Nature or Spirits. If these be then *merely* assumed, the mind remains in the presence of chance (sect. 1). But if it now be supposed *necessary* to assume any such thing, that thing is then *proved absurd*. For such a thing is then conceived *irreconcileable* with the mind, *of necessity* unintelligible—and what else can that be than *absurd* ? That the mind, being likewise assumed, may *dress up* such an absurdity in some rational notions may be, indeed, admitted. But what after all can this amount to, but dressing up the ass, as it were, in the lion's skin ? A philosophy like Locke's I shall call, for this reason, *sceptical*.

6. I take it to be a truth of the first importance for philosophy—that to reason, to understand, to philosophize, the philosopher must assume only his own mind and the principles he finds *there*. That either contradiction or scepticism lies at the root of most philosophies will not,

I think, be disputed by those who investigate the distinction made in sects. 4 and 5. In particular *scepticism* has seemed to delay the mind's search for truth. A natural doubt has made men fearful of supposing powers in the mind of such force and pregnancy as the very existence of philosophy seems notwithstanding to presuppose (sect. 1). To me at least it seems certain that we rate the mind too low in making her the slave of *experience* ;—we have not, I think, seen, that such reasonings can but support that *chance* which reason can only be designed to remove out of the way. It seems evident to me that reflection must lead us to think natural that propensity to reason *chance* out of the world, which is now often thought to be impossible. Most men's minds take fright at chance, and feel a sure power in them to make an end of it. And even those who think themselves wise by despising that mind which makes them so, might change their opinions were they to understand what they really contend for—they would, at least, be less positive, if they could only be convinced of the ass's body under their lion's skin.

My object in making these observations is to anticipate, if possible, some objections which the reader might otherwise make to a mode of thought which I shall endeavour to pursue in the following pages.

DESIRE AND REASON

INTRODUCTION TO PART I

THE SOUL'S ORIGINAL OBJECT

7. If it be the truth that the mind must first lose its knowledge, in order afterwards to regain it (sect. 3);—like a corn of wheat dying, in order to “bring forth much fruit”; it is certain that some creative *impulse* must be originally assumed in the mind. This impulse I shall call *desire*; inasmuch as desire is the only source of activity of which our mind has a conception. This likewise follows from our definition of philosophy: namely, that the energy of such an original impulse must be supposed able (if the mind’s instinct be trusted) to *deduce* those several forms of existence which were at first presented to the mind only fortuitously (sect. 1): and from this deduction we may expect the following consequences:—first, we may hope to leave behind us the irrational world of chance (sect. 3); secondly, to avoid all contradiction (sect. 4); and thirdly, to escape that scepticism, which consists in assuming *other* things with the mind, and in thus making these unintelligible (sect. 5, 6).

8. I propose therefore to inquire, what is the nature of desire, and what Objects it pursues. My purpose is to show, first, that *desire* is the mind’s original principle; secondly, that the Objects of desire are the same as those

of the *understanding* or *intellect*—which is thus, when rightly considered, identical with it ; and, in the third place, that the movement of desire towards these Objects constitutes our *will* or *activity*.

I shall also try to show by what stages desire evolves our *knowledge* of the world : how upon the ground of what I shall call *Impressions* desire first builds for itself its knowledge of *Nature*, infinite but unconscious ; how this unconsciousness forces it to conceive a world of *Spirits*, conscious but finite ; and how, finally, desire conceives that Spirit, at once conscious and infinite, whom it calls *God* ; in whom having obtained a final satisfaction it of necessity ceases from its self-assigned work of knowledge.

9. If we examine, why our minds are averse from this kind of enquiry, we shall find, I think, our whole difficulty can be reduced to this doubt, namely, whether the existence of the mind *without* the knowledge of its Objects is possible. It will be said that the knowledge we have of things is necessary to us ; that to reduce the mind to a complete ignorance must bring it to nothing ; in short, that what we propose cannot be done. But in arguing thus, we are, I think, assuming overmuch. We must rather inquire whether these beliefs are true or not, than hastily suppose that they are so. And that we may test these beliefs, it is necessary only to inquire what the real relation of the soul is to its Objects. As to this question, this should I think be first considered :—that the mind, in order to know objects external to itself, must *represent* or *symbolise* those objects : in what other way could that intellectual connexion with them be made in which knowledge must consist ? To determine the logical properties of a *symbol*, is thus what this question really implies. Now it is plain that a symbol is a thing to which some

meaning has been given : the meaning being, for some reason, conveniently *imposed* on the thing, since the thing never exists *through* its meaning, nor can even be certain of retaining it. A *ring*, for example, a *crescent*, or a *flag*—which may symbolise a marriage, a religion, or a state—these first exist as simple pieces of matter, which is all that some men may ever see in them. Thus again with the symbols of *language*—these being in themselves sounds may for some men acquire a meaning : so a European, for instance, may learn Javanese. He will in that case transform sounds into symbols ; those bare *sounds* then becoming a means for him to see into other men's *thoughts*, and to acquire a knowledge of what was formerly hidden from him. Suppose, however—what certainly might happen—that he forgot those meanings :—this means of knowledge would then again be closed to his mind. Now from these various considerations it follows (it seems to me) that the soul can exist *without* a knowledge of its Objects ; for we may, finally, deduce, in this sense, the relation of the mind to all outward Objects :—They being supposed *known* to the mind, it follows, *first*, that the mind includes things which *carry a meaning*—this meaning being all the *knowledge* the mind has, or can have, of those Objects. But, *secondly*, those things in the soul exist, as little as other symbols, in *virtue* of their meaning : and they might lose, or never have acquired, it. I can, in short, conceive such things *in themselves*, as I can conceive a marriage ring in itself ; or the Javanese word *ibu*, or even the more familiar words, *horse*, *men*, *stone*, in *themselves*.

10. This conclusion admits, I conceive, the following inferences : first, the mind consists of things which mean or symbolise three several objects, *i.e.*, *God*, *Spirits* and *Nature* :—secondly, such meanings arise through some

8 MIND IS SIGNIFICANT OF GOD, SPIRITS AND NATURE

activity of the mind, which might not have them :—thirdly, (and as a consequence of these) the mind's knowledge or experience springs from the mind's own nature. So much I think seems evident. But in order to have a clearer view of these consequences, we should consider the scope of these meanings more closely ; examine whether they can, like the meanings of words, be taken away ; and so deduce with more evidence the origin of the mind's experience. Now, by God is meant an *Eternal* or *Infinite Spirit*. That we speak of God as a *Spirit* is a proof that it is through our own minds, or spirit, that we know, or divine, Him. The meaning which thus accrues to our minds gains an additional significance in their signifying Him to be *infinite*. Now we may see in this, it seems evident, a true analogy with words : for as by the meaning of a word, I know, or as it were see, into another man's *thought*, so by the meaning of my spirit I see into that Being which I call God : neither the word nor my spirit has, however, the *nature* of those external things which either means ; the thing meaning and the thing that is meant being in each case different.

11. A second significance in a *word* being attended to, one *idea* is exchanged for another in the mind. And so too when the mind symbolises a second Object of *knowledge* : as one thing disappears, so another then *appears* to the mind. Thus is the knowledge of *God* exchanged for a knowledge of Spirits called *finite*. In them the mind perceives its own image ; its desires, thoughts and sensations now perceive things which resemble *themselves*. To carry on the likeness with words :—As onomatopoeic words, like peewit or cuckoo, signify things to some extent like *themselves* : so the mind signifies things which recall its own nature.

12. It is thus when we come in turn to the *Natural World* :—one view again passes into another, and this *third*

Object then appears : being a thing very different from God and from Finite Spirits ;—for of the *conscious* existence of these it is plain that nothing is perceived in Nature. Thus that desire, understanding and will which make the mind conscious have in this case acquired no meaning. Only those *sensations* of the mind by which we see, hear, and otherwise perceive the Natural World have had a meaning imposed on them. These *parts* of the mind tend to signify eternal, infinite beings : as the *whole* mind signified, in God, these same attributes. For sensations are plainly finite, yet may signify an existence known to be infinite : and whereas sensations appear and instantly fade in the mind, Nature on the other hand is known for maintaining a more permanent, or even an eternal, existence.

13. Having considered the scope of those meanings whereby God, Spirits, and Nature are known to the mind, we proceed to inquire whether such meanings may, like the meanings of words, be rightly *withdrawn* from the mind. Perhaps no one will think it difficult to withdraw that significance whereby the mind knows the Infinite Being. That this meaning, indeed, is very imperfectly present in the mind : that it may not be acquired or may, being acquired, be lost by us : is evident from men's own admissions. Men catch this meaning at instants only, like the meaning of half-remembered words. They do not see this Object unwaveringly, as they see stones, trees and houses. *These* seem to them (before reflection comes) to be objects of an *immediate* vision ; they appear to reveal *themselves* to the mind, as if by some energy of their own (sect. 1) : they thus escape all question. But this infinite Object, being barely symbolised by the mind, for no other reason seems to it *imperceptible* ; it is not thought to impose *itself* on the mind, and remains an object of men's uneasy speculation.

14. As to that meaning which, imparted equally to the whole mind, acquaints us with Finite Spirits, this no doubt is instinctively, and hence without effort, supported by the mind. We make no doubt of the existence of Spirits—which shows our minds are accustomed to, and easily sustain, this meaning (sect. 13). Without this meaning, living bodies would, like inert bodies, seem to move only mechanically. But that we may take this meaning away seems to me not doubtful: I do not say, in *fact*, but much as a scholar might remove from the sound *equus* its acquired meaning. For the human mind resembles a scholar:—difficult perhaps to convince that he was once ignorant, but, still, not beyond all persuasion of it. As *his* humour may come to credit some original unacquaintance with declensions and quantities, so we may admit the mind's original ignorance of all kinds of Spirits. We shall thus withdraw this *second* significance from the mind, as we might withdraw from the word *divine* a second meaning included in that sound.

15. Of *Nature*, in the last place, it will perhaps still be said that *it* at least we cannot take away; that we have only to open our *eyes* to perceive it; that it is once for all *given* to us: in short, that without a knowledge of *this* Object the mind cannot exist.—I answer, first, that *then to reason* is beyond us;—then are we altogether at the mercy of chance, and resigned to scepticism (sect. 5): which is what, I think, no one really aware of what that involves (sect. 6) will easily believe. Secondly, that some *logical eccentricity* ought, in that case, to be proved in this Object, distinguishing it from other external objects; but this has not, and, I think, cannot be done. Thirdly, that there exist manifold reasons to think the opposite. For let us consider what this view really means. It can mean only that the mind cannot exist without *sensations of natural*

things—since it is admitted that through these alone the mind knows of, or can perceive, Nature. Now that such sensations are *symbols* there seems to be no doubt ; they have, then, the nature of symbols : it therefore seems evident, that their *meaning* may be removed (sect. 9) : accordingly the mind may exist without being aware of the Natural World. I say that Nature may be as easily lost to knowledge as the Divine Being—if the mind has no *purpose* to fulfil in the Natural World, this Object will never appear to the mind. I know indeed that to remove these Natural meanings may seem as unnatural as it must certainly be difficult : but then it must be equally so to remove the meanings of the words *horse* and *man* ; yet would any suppose that, on this account, those sounds *depend* on their meaning ? That sensations are symbols seems indeed perfectly evident :—They may, like symbols, be considered *apart* from the things they signify, as Berkeley so distinctly perceived. He knew we could distinguish these parts of the mind and consider them by themselves. Add (what, considering his purpose, he strangely omitted) that those sensations need *signify* nothing, and we perfect the resemblance to symbols : thus leaving a blank in Nature's place. Upon the whole, there seems no doubt we can as easily remove this meaning from the soul as we might strip from the word *divine* its third and final signification. Sensations which have thus lost their meaning are no more significant than *bare sounds*. I shall show later that they make on the soul an *impression* of pleasure or pain. I shall therefore call them, in what follows, *impressions*, in order to distinguish them from the sensations they must presently become.

16. The *origin* of the soul's knowledge has, I think, been thus, in a general sense, made out. It will, I hope, be evident (after what has been said) that there can be no

ground to think that God, Spirits, and even Nature itself, are *immediately* present to the mind. To me at least it seems evident that they are not what they are commonly taken to be, viz., things somehow imposed on the mind, like writing on a sheet of paper, and termed our *experience*. From what we have said it is plain that no *such* experience can ever exist. On the contrary, the mind's knowledge of things must be conceived to proceed from her own nature ; it being by her activity alone that any of these things can ever appear to her (sect. 13, 14, 15). Whence it follows that things can be known only in virtue of some requirement of the mind's own nature. Some original impulse must, in short, be supposed in the mind, which impels her to put on those meanings by means of which things appear to her : hence explaining or making these *necessary* (sect. 1). That this impulse is what we term *desire*, *will*, I believe, also be allowed ;—it being considered once again, that desire is the only source of activity of which we have any conception (sect. 7).

17. I come now to consider what the soul's *first* Object must, in the light of these reflections, be supposed to be. It will be evident that the *residue* left over after the soul's meanings have been detached is, on the one hand, its desire, understanding, and will—or what composes its original *Consciousness* : on the other hand, its *Impressions*. The one we have assumed to constitute that principle whence our knowledge of things may be in due order deduced (sect. 7, 8, 16). I shall now make some observations on the other, trusting it may be remembered that Impressions do not imply or signify a Being external to themselves (sect. 15). We may thus hope to bring to light the soul's original Object.

18. It is evident that Impressions are elementary actualities or real things, and are not *principles* ; hence they form a part of *experience* (sect. 2). Something they have of the nature of physical objects, as this evidently shows—that they bear the *meanings* through which Nature is, for our minds, constituted (sect. 12). In short, no *material* could be observed in this Object without them. Hence they are as real as they are (under the name of *ideas*) asserted to be by Berkeley : The “ *ideas imprinted on the senses*,” he says, “ are *real things*.” At the same time, Impressions are the most elementary things we know, or can know, of. Not perceived through any *meaning*, and there being therefore nothing of which they can be deprived, they are the simplest things that can exist. They lie, in short, within, and not outside, the mind, which immediately perceives them.

19. Thus, under the mind's *outer* meanings or coverings, there lies, so to speak, an under-dress of *Impressions* ; these forming, as we have said, a fourth kind of experience. To *assume any* kind of experience, we have shown to be, in strict truth, absurd (sect. 5, 6). Therefore this last vestige of knowledge must be taken in turn from the mind. I know very well that, if the mind could exist only *through* its experience, we could not, without violating its nature, remove from it this final covering. But there can be no reason to prevent our doing this, so soon as our experience is seen in its true character, as involved and required by the mind's own nature (sect. 16).

20. After what has been laid down we can, it seems to me, infer with certainty what kind of Object that is to which the soul is first attracted (sect. 17). For that this Object must lie among *impressions* seems evident—these being experiences or actual things, and the most simple of them. I say this seems to me *evident* : nor, I think, can it be denied

to be so by those who have followed the course of our argument. I know indeed that the reader may raise some pertinent objections to our principles, but these I shall attempt, so far as I can, to clear up in the sequel.

21. We shall now introduce a further fact with respect to Impressions, which tends to show in what the soul's primitive Object more particularly consists. And this is the original power of the soul of conceiving *any* number of *like* impressions *aaa...* It is evident that *no* kind of impression is such that nothing further of *the same kind* can be conceived by the soul: nor can the thought of three, four, or any other number of such impressions preclude the thought of any number in addition. The observation of this simple, although curious, fact plainly shows the mind's original Object to be, not any single impression (*a*), but an *unlimited train* or *succession* of impressions (*aaa...*). I say, the very character of such a succession shows it to be an original, underived idea of the *mind*. For, as it is impossible that any such idea should arise from the *experience* of impressions;—the largest number of which, being finite, this idea will always exceed;—so it is certain it must form an original anticipation or conception of the mind.

22. The *differences* of impressions which we distinguish, as of odours, sounds, flavours and the like, are not such that the soul can of itself anticipate an unlimited train, or indeed any one, of them; they form no necessary *system*, as does a train of *like* impressions. *Difference* accordingly forms no part of the soul's original Object. The fact, however, that differences have *come together* in our own minds admits of our conceiving any *one* as an Object of the original mind: since *any* impression may form a systematic succession *aaa...* (sect. 21). Of these possible Objects some require our more particular notice in this place, because they imply new forms of *unlimitedness*.

23. Thus suppose the immediate perception (sect. 15) of a colour or *plane physical surface* to have been first conceived. It has been shown that the soul has the property of anticipating one, two, or any other number of such impressions successively (*aaa...*) (sect. 21). It must be noticed now that the soul may, if it please, introduce *other* parts into such a succession ; the conception of such an Object portending, in the being which is to realize it, the dimensions of *length* and *breadth*. Now dimensions may be conceived as enlarged, and that enlargement as itself further enlarged, and so on without end (*aaa...*). The reversal of these steps may, in turn, be conceived as unending ; the notion of successive expansions permitting that of successive contractions (*aaa...*). Many other features besides may be premeditated of a thing of this kind : as, for example, approximations to the mathematical notions of curves, closed and open. These notions agree in being *anticipated* or *conceived* by the soul. Experience has no part in them. The mind may *know* as many members of these series as anyone pleases—it will not be in the least prevented thereby from thinking of and seeking still more :—which one consideration sufficiently proves the original dependence of these notions on the mind.

24. We shall try to show in the sequel that this power first regains for the soul its knowledge of Nature : the more simple form of that power (*aaa...*) determining the eternity, as the more complex (*aaa...aaa...*), the limitlessness of that Object. We shall attempt to fulfil our definition of the aim of philosophy by proving this ability of the soul to conceive and pursue a train of impressions to be the ultimate source of the *rest* of the mind's powers (sect. 3). Without this *predisposition* of the mind we shall try to show that nothing could be sought, nothing known, nothing felt or rejoiced in. It is accordingly this primitive power which

takes, in our view, the place of that "blank sheet of paper" supposed by some to constitute the original mind (sect. 16).

25. We have shown, I think, the nature of the soul's original Object. We have considered those meanings whence the knowledge of other Objects is obtained. And, lastly, we have shown the *desire* of these Objects to be the cause of their appearing before the mind. We shall, in what follows, term this desire the soul's *reason*, and those things which conform to it we shall call *rational* or *a priori*. Our purpose—explained in sect. 8—would have been more easy to accomplish if experience had always conformed to the nature of the mind—if the mind had, in short, been able to pass without hindrance from Impressions to Nature, from Nature to Spirits, and from Spirits to God. But, excepting indeed the Divine Being, these Objects, we conceive, exhibit *defects*,—as including features which have from the first perplexed philosophers, and given no little plausibility to the schools of sceptical philosophy (sect. 5). These imperfect things are not indeed without relation to our rational nature. On the contrary, Reason alone, in measuring such things, discovers their deficiency. Nor, it is evident, could our minds, without desire, judge things to be imperfect. Desires, like doors, shut or set open, deny or grant admission equally to accidental and to rational objects of knowledge (sect. 24). Such chance objects as are thus let into the mind are not, however, in an immediate sense, rational or *a priori*: as being objects which the mind cannot *immediately* deduce from its own nature, I shall call them *irrational* or *a posteriori*. To show some truth of reason in these perplexed appearances—to seek their *real* among their irrational shapes, must be a great part of our task. That I may enable the reader to follow our argument more easily, I shall here summarize these apparent *defects*, as well as what

I conceive to be the nature of their *solution*. In brief, I suppose *Impressions* to be defective in three points, viz., in their fortuitous *origin*; in their *difference*; and in their *indeterminateness*: the solution of these defects will be shown to lie in three associated principles, viz., in a *teleological principle of the will*, and in two deterministic principles of *substance*, and of *cause and effect*. Some account of what I conceive to be the rational significance of humour and of beauty will introduce the discussion of these remedial principles (Part I). In *Nature* the same errors will be shown, and hence the same solutions (Part II). Lastly, these evils portend that defect in the *spiritual* world which is commonly distinguished as *moral*; Spirits may, we suppose, be *relieved* of error: herein lying their *freedom* (Part III). In the concluding Part, I shall inquire into the nature of error itself, and show how far and in what sense it can be considered consistent with reason.

26. From the *definition* of the soul's original Object we proceed to the inquiry *how this Object comes to exist* for the mind (sect. 19). To reply to this question, while the soul is supposed to *depend* upon its experience (sect. 16), must be beyond our power. This Object must then be thought to be imposed on the soul; it cannot therefore, being assumed, be deduced, *i.e.*, made *necessary* (sect. 1, 5). Natural philosophers will indeed say that the cause of impressions lies in the physical world; that impressions arise through our senses; and may therefore be thus accounted for. But this derivation, even were it demonstrably true, would be no rational *explanation*. For this *Nature*, in which such causes are supposed, being only assumed, must be itself inexplicable: so that the explanation rests at bottom on a being, in strictness, absurd and unintelligible (sect. 5, 6). Nor, even if *Nature* could be truly

deduced, should we be any better off ; it being evidently true that "it hath never been explained, nor can it be explained how external bodies, figures and motions, should produce an appearance in the mind." *Berkeley, Siris*, sect. 251.

27. It was the opinion of Berkeley that impressions (or what he termed *ideas*) were implanted in the mind by God. But neither will this really do. The argument of Berkeley suffers from the defect of that of the physicists : God being assumed by him, as Nature is by them. Might we then claim to *deduce* some omnipotent Being, for the very reason that impressions must have a cause ? But neither would this help to deduce our *impressions*, that is, show us for what reason they *must* be present in the mind.

28. It remains then for us to look into our original principle, in order to deduce this Object of the mind : for this *principle* we may rightly assume, and our doing so will not involve us in, but on the contrary free us from, scepticism (sect. 2, 3). If then we look into the soul (sect. 24) we ought to discern therein why we must have impressions. Now, the soul is, we conceive, a nature which perceiving impressions to have the property or *capability* of existing (sect. 21, 23), consists in desiring them. Desire therefore should itself be a principle to involve and require this Object. And that it is so seems clear. For desire is evidently a nature which unites with a consciousness of a thing *not* attained, that of the *necessity* to reach and to attain it : hence desire implies its Object's *being, actuality* or *existence* for its necessary consequence or effect. Or to put the matter thus : No desire forms a logical *whole*, but, subsisting only in *requiring* what will complete its own partial and defective existence, makes its preconceived Object *necessary to itself* (sect. 16). I conclude we may call the soul a *teleological principle*, *i.e.*, a principle which, combining with desire and understanding, a necessary,

inevitable *will*, involves the existence of its preconceived Object.

29. Some will perhaps still think that the soul cannot be a *rational* cause, because, in their view, it never is an *actual* one. They will perhaps say that this *a priori* claim of the mind is a mere *error*, which, that we may conform to experience, we ought to abandon. They may point, also, to men whom desire has led absurdly astray from the track of experience ; who live, as the saying is, in a “ fool's paradise ” ; whose “ wish is father to their thought ” ; and whose very sanity may sometimes be called in question.

30. To which I reply, that there would, no doubt, be much truth in these contentions, if experience were what is alleged by these thinkers—a *law imposed* on the mind, which must be servilely followed by reason. But experience (as we have seen) never, in strict truth, governing, but always *following* reason (sect. 16), it is impossible that we should by our *experience* distinguish what we must think, and what we ought *not* to think—the *forms* of the reason must remain ever independent of the real or apparent irrationalities of experience (sect. 25). As for the cases of deluded men which these thinkers allege,—such cases, when rightly considered, damage the argument of those who advance them. For what can they all mean except that the mind has an original power to derive from *itself* its preconceived objects ? Whether or no material philosophers be right in supposing the mind impotent to affect the real course of things will appear more clearly in the sequel. I shall only point now to one evident (and, I take it, indisputable) instance of the mind's real activity, namely, its power of organising the motions of bodies.

31. Before we proceed to the mind's actual experience, it remains to deduce the *consequences* of the soul's rational

power to create its pre-supposed Object (*aaa...*). We shall show that it is the nature of this Object to include three diverse *types* of impressions. To these we shall give the names, *future* impressions, *present* impressions, and impressions of *memory*. The deduction of these types, in determining the forms which our *knowledge* of this Object must assume, will at the same time lead to a more complete definition of the rational soul itself, and of its primitive, or original, faculties.

32. The soul's original Object, although of an apparently simple description, is yet in fact of a very striking complexity. Although present in the conception or anticipation of the soul as a single, unsuccessive thought ; it must at the same time be conceived to be one about to come into *being* in order and succession. The soul must apprehend the impressions *aaa...* as compelled to appear in it *each in turn* ; and as being attainable, like its expected satisfaction, not all at once, but only gradually and step by step.

33. The soul's knowledge of "the future in the instant," which is thus implicated in the soul's original essence, is itself of a complex and peculiar kind. For that apprehension which the soul has of *one* of those future parts of its being cannot be that which it must have of *another* : its future must rather be mirrored in it in a kind of never-ending perspective. The cause of this is that a *first* of the impressions *aaa...* must be anticipated and be about to exist ; *one* then there must be which lies upon the very confines of being. It is like a word which a man is on the very point of uttering : thus it must engage the mind more unreservedly than its successors. These cannot receive so complete a form from the mind ; but must remain undeveloped ; be barely supported ; and, so far, be little removed from nothing. It follows that, of such impressions, one will have for the soul

one, and another another, nature : the first, one more clear and distinct ; the others, faint and uncertain ; in a natural proportion to the interest which the soul feels for them. And so in turn with all the parts of the series—those which are to follow will seem of necessity less defined than those which are to precede. Such a perspective seems to exist in some measure in our own more complex previsions : as in the case of a musician, who, foreseeing the whole series of the sounds of a composition he is on the point of performing, yet of necessity *rounds* in his mind the opening chord and subject ; less completely develops what is to follow ; and scarcely concerns himself with the close : for his anticipation of the opening is full and articulate and detailed, but of the rest, less and less so. It is thus again with an orator or with anyone else who is about to bring into existence any succession of events which he has anticipated.

34. The creation, in the second place, by the soul of that impression which is upon the verge of existence must now *necessarily* follow (sect. 1, 16, 28). This impression, in first satisfying the soul's want of existence (sect. 26), forms the ground of the soul's original *pleasure* (sect. 15). In this first moment of her satisfaction the soul recognises her desire as having been superseded (sect. 28), and what was to be (sect. 33) as having passed into existence. A complex apprehension must accordingly attend the mind's recognition at once of her *satisfaction* and of the *impression* which forms the ground of that satisfaction ; for the nature of these only *exists* as each implies its own former state :—satisfaction implying desire, and the now actual, the then anticipated, impression. The impression which thus satisfies the soul forms an essential part of her *self* ; for it has, like Berkeley's *ideas*, no existence except through the soul's apprehension (sect. 18) : a condition which is thus natural

to Being : and which involves that the soul must unite in herself the characters at once of an unvarying principle (sect. 21, 23) and of a changing succession of things (sect. 18).

35. To the instability of such a succession must be attributed in the last place a third type of impressions. For the soul's attainment of the first of the series (a_1) must have the immediate consequence of transferring her expectancy to the second (a_2) ; which acquiring, then, that lucidity which was before confined to the first (sect. 33, 34), must preoccupy the soul's interest in its predecessor (a_1) : its former nature, being now incompletely maintained, must thus appear to the soul as determined to a new type of being. A more complex apprehension will now, accordingly, attend the soul's recognition of this impression (a_2). For what this impression has *become* for the soul must depend upon what it *was* for the soul : thus what it *was* will be again (sect. 34) implied in it.

36. The impression a_1 —which, by thus implying in its present its *former* state of existence, starts the mind's *memory*,—must be a nature liable to a further decline as the soul continues to give room to its Object ; for in concert with the second (a_2) the impression a_1 must decline again at the approach of the third. It must be with these, as it was with future, impressions : there must be a perspective of the one as there was of the other (sect. 33). Some impressions stand closer to the centre (a_2) of the soul's changing interest ; and these share its nature (sect. 33, 34), and are least evidently to be distinguished from it. Others lie more remote from it : their characters (sect. 33, 34) are incompletely maintained in them ; and become faint, confused and uncertain. Thus the impressions of memory fall as it were into the shadow which desire, like the figure of a sower,

throws continually back on her furrow. We may think such impressions, none the less, simple means of the mind's *pleasure* (sect. 20). Like sounds in the mind of a musician (sect. 33), which, dying in his recollection, survive in the pleasure of his growing *attainment* : so the soul's vanishing impressions, although deprived of their passing lucidity, may be thought to determine within her the beginning of a satisfaction which is not to end until a perfect Object has been entertained by her (sect. 8, 24).

37. The observations made in sect. 32-36 show that the character of the soul's *a priori* Object *aaa...* determines what the soul must *itself* be, or become upon being actualised ; namely, a nature uniting within itself, in virtue of its original principle (sect. 24), several distinct forms of consciousness. These may be called the soul's original *faculties* ; for they constitute the general forms of its primitive understanding. These faculties are not separate and unadjusted to one another ; they cannot perch (as Plato says) in the mind "as in a sort of Trojan horse." For although impressions arise successively in the mind, yet because their succession is united within one apprehension (sect. 32) a single view may collect and embrace them all. Accordingly the several varieties of impressions must be naturally united in the mind ; and, if we speak only of its perfect condition, wholly and indissolubly in it.

38. We have now defined the nature of the soul in itself ; and determined what it must become in virtue of its desiring such an Object as we have been describing (sect. 32-37). We may, I think, hope that we have thus brought to light the *first* form or principle of the *Reason* (sect. 25). We shall now proceed to show the immediate *consequences* of this principle. These arise from the function which this principle

shares with other *a priori* Conceptions of being the measure of the perfection or imperfection, the truth or the error, of the experience in which it is interested (sect. 25).

PART I

THE SOUL AND ITS IMPRESSIONS

39. THAT may be called a rational experience which is involved by a principle (sect. 25) ; but things may appear to be at first sight irrational. Impressions, like other forms of reality, seem in the beginning to be imperfectly expressive of the *a priori* pattern designed for them, and to wear in consequence a strange, and scarcely recognisable, appearance. We need not be altogether surprised at this defect in them. The probability of our experience—

not answering the aim,
And that unbodied figure of the thought
That gave 't surmised shape,

has been already supposed by us (sect. 25) ; since we saw reason to think that through desire, as through a kind of door, a being *other* than the being which we intend, in other words, an *a posteriori* and not *a priori* being, might break into the mind.

40. We must, however, premise that the soul's intended purpose cannot be completely frustrated ; since it is not in the nature of a desire to remain stable : a desire must, then, like a body out of equilibrium, as if by its own momentum follow its natural bent (sect. 28). A desire might be compared to a current of water, which, if it cannot flow one way, yet does not on this account fail to pursue a course of its own. Accordingly, the soul must be thought competent to excite in itself a train of impressions. Nor

does it in fact fail to do this when, *imagining* the series *aaa...*, it engenders within itself a *knowledge* (sect. 34-36) of those successive impressions :—“It is no more than *willing*” says Berkeley, “and straightway this or that idea arises in my fancy.” Such may, I think, be reasonably thought to be the origin in the soul of the Imagination : a nature which seems so often to form substantial objects ; although in comparison with things of a more actual kind its shapes may seem shadowy phantoms, or like the reflections of things seen in water.

41. The imagination, being thus implicated in the soul’s original *essence* (sect. 24, 28), has an *a priori* nature ; although it can arise in the soul only in connection with some disturbance of the *will’s* rational function. Imagined impressions, in being formed by the soul, might be termed its true children ; although they are, if I may say so, its still-born children. The connexion of the *imagination* with the needs of the *reason* explains that strong persuasive force which is so often annexed to this faculty : from the influence of which the soul seems rarely, and is perhaps never, able completely to extricate itself. It is the source of men’s most common delusions (sect. 30) ; and it is through the imagination that even the most experienced of men may often become the dupes of their wishes. If men were incapable of imagining they could not have engendered within them those likenesses of things which deceive them.

42. It would, however, seem an unaccountable thing if the soul were to remain in a state so imperfectly consistent with its original principle as that of the fancy. For the soul implies a complete being (sect. 24). It is therefore irrational that her implication should not be fulfilled (sect. 28, 38). It follows that the sterility of the will must be held to be

not irremediable. And it will not be so, if the object of the will may come *of itself* into existence, appear in the mind by *chance*, or be, in other words, *found* there: this is the next step in the soul's gradual development which we are describing.

43. That what is thus *given* can be only imperfectly rational is however a necessary consequence of the principles which have been already laid down. It cannot, on the one hand, be completely irrational; since the soul must be fulfilled (sect. 28, 42). But neither, on the other, can it be completely rational. For impressions that have not their source in the will can never be completely explained (sect. 28). Impressions determined by chance are thus in this respect inferior to those which are *imagined*; because these are excited by the soul (sect. 40); although they are superior to the creations of fancy in virtue of the presence in them of a more complete actuality.

44. This having been premised, we may assign to the soul some actual impression *a*; which, although excited neither by herself nor another (sect. 26, 27), is yet consistent with and implies that *growth* of the soul which is required. Such an impression can be as easily apprehended by the soul as if her own principle had ended therein (sect. 28). The soul becomes, in this way, a Being aware of there having been formed in herself the predicate which her nature requires. And to this the soul now therefore gives at once its meaning and its existence (sect. 34).

45. It should be considered that such an experience must have an important effect on the soul, in finally disturbing, and driving her out of, that fancied world which, although it resembles (sect. 41), yet fails to accord with, her original pattern (sect. 24). Like Bunyan, the soul has awokened—"and behold it is a dream." A more actual

impression has made its way into the stream of the imagination ; the soul must accordingly undergo a change like that which we may ourselves experience upon completely awaking. The soul's disillusion makes it in some respects a nature more familiar to ourselves than it may in its primitive condition have seemed to us (sect. 28). For the failure of its *will* must be now distinctly revealed to it. An impassable division must seem to intervene between its self and its experience ; and the *a posteriori* conceptions of a will without an effect, and of a being without a cause, have been plainly formed in it.

46. Experience must in this way tend to the enlargement of the soul's primitive character (sect. 21, 28). For one or two impressions having been by chance established in the mind, the whole succession *aaa...* may be conceived as equally able to be *received as determined* by it (sect. 32, 33). This change—together with its consequences, that such being may *actually* be received (sect. 34), and remembered (sect. 35, 36)—depends on the circumstance that nothing *a posteriori* can exist without being *intelligible*, or (what is the same thing) capable, to the extent compatible with its imperfect nature, of assuming in the conception and the knowledge of the soul those essential forms which make things rational (sect. 38).

47. The expectation which the mind is thus able to form of its existence (sect. 40, 46) leads it into a state of uncertainty which, while it disturbs its rational state (sect. 24), invests it with certain features very recognisable in ourselves. In its inability to *excite* its impressions *aaa...* it can only prepare itself for their *reception*. It becomes *attentive* ; while it does what it can as it were to open its self with a view to admitting into it what its nature requires (sect. 25). So an experimental psychologist attends when

he is on the point of receiving a signal. Such an activity introduces a new notion to the soul ; for in its uncertainty what that shall be which is about to appear in it (sect. 45, 46), it conceives the idea of the *possible* : a nature which, being clearly neither completely actual on the one hand nor, on the other, imaginary, hovers evenly between either nature ; until the one or the other comes into existence (sect. 34, 40). This strange, although temporary, communion of different natures in a single one reflects itself in the soul's feeling ; which itself becomes in turn doubtful and composite. For one thing being desired (sect. 44), and another not (sect. 45), by the soul ; the soul must, from its inability to determine which of the two is to be formed in it, begin to *hope* for the one, while at the same time it *fears* the other. Such appears to be the origin of these various dispositions of the soul ; for they seem to be consequent upon the will's incapacity, and to spring immediately from it.

48. This incapacity of the will seems the ground of other of those troubles which the mind is heir to :—like the fabled monster Echidna it seems to give birth to natures as perplexing as itself. That the *differences* of impressions are among these irrational natures will, I think, appear plainly from the consideration that, whereas *like* impressions (*aaa...*) form with each other an *a priori* system (sect. 21, 23), there exists among *different* impressions none but an *a posteriori* or *chance* connexion (sect. 22). The faculty of the *Imagination* points to the *a posteriori* origin of this *second* defect of impressions (sect. 25). For this faculty being an *a priori* one (sect. 41), nothing accidental can naturally spring from it. Nor does the different, we see, do so. For, although we may, indeed, reduplicate any of those impressions that we have met with in our *a posteriori* intercourse with experience, our *Imagination* is itself never the original source of new forms of existence.

49. But to assign a limit to the mode and quality of Being when the soul, by reason of her inability to excite, is compelled to *receive*, her impressions, must be necessarily impossible. Impressions may then be such as they may, so long as they continue to be *impressions*. Thus *differences* arise; which are unnatural, *a posteriori* forms of the actual; and so strangely distinct from what might be looked for that perhaps only the blindness of custom can make them seem natural to us. The mind is a nature open to receive what it is designed to invite (sect. 25): but (if I may use the illustration) the guests who answer its summons wear the unaccountable features of unknown and mysterious strangers (sect. 25). The whimsical appearance, and singular intrusion, of these differences into existence, has led to philosophers' attempting, like hopeful magicians, to throw intellectual spells on them;—their origin, they have sometimes contended, is the same; and their diversity, an appearance: although the difficulties which reason has here to meet seem insuperable; nothing hitherto proposed having succeeded in identifying a sound with a colour, a colour with an odour, or either of these with a flavour.

50. Differences are, indeed, but imperfectly rational natures; in this resembling that accidental experience of which they are a form (sect. 43). Upon the one hand, being *actual* and showing no defect in this material point, they are not wholly irrational (sect. 42). A perfect being stamps the most eccentric difference: it has actuality in that complete degree which is wanting to the creations of fancy (sect. 41). Thus the soul is not unable, when receiving and adopting such difference, to use it as a means of that growth and development of her nature which she only exists to attain.

51. And yet differences are *imperfectly* rational natures. Being not only actual, but, equally, different,—it cannot be denied that of their difference itself no *a priori* account can

be given. For what is in harmony with the principle of the soul a reason can be supposed (sect. 38); but not for that which is not. Of this, in so far as it deviates from that natural measure, no account can be given, as was shown in sect. 43.

52. The observation may be added, that there arises at this point the distinction of *mere* actuality or being from actuality and being which are *qualified*. Things are the *same* in having actuality and being; but *distinct* in having a qualified actuality and being. Such abstract being has therefore as much an *a posteriori*, as the conception of Being itself has an *a priori* (sect. 21, 28), origin.

53. We may now attribute to the soul, in addition to the impression *a* (sect. 44), a *different* impression *a₁*; which, while it has those characters which were described in sect. 44, 45, 47, at the same time introduces such others into the mind as occur in ourselves when, expecting a thing to be light, we find it *heavy*—or hot, and feel it *cold*. The shock or disturbance which runs through our minds at such moments must more painfully surprise and startle the primitive soul; since, of that difference, which is nothing extraordinary to ourselves, the soul has been supposed to be hitherto without any knowledge. Her want of familiarity may at first render her unable to distinguish the difference plainly. The soul will be likely to conceive the impression *a₁* to be at once *necessarily* like but *actually not* like what she expects (*a*); until, perceiving herself unable to *maintain* such a contradiction, in the moment of attempting to evade the conclusion she will, nevertheless, be compelled to adopt it:—That what she has become is *not* what she anticipated becoming. In this condition the soul must then necessarily remain;—more composed than she was in the moment of contradiction: but much less so than she

must have been in the possession of her own rational object.

54. The soul will thus do itself some violence in receiving difference into itself ; since, while to *affirm* is to be in harmony with itself (so that to affirm is an *a priori* process) : to *deny* is to be out of harmony with itself, and implies its diversion from the course which is natural to it. Nevertheless it is inevitable that the soul should try this new way ; and, once again enlarging the area of its knowledge (sect. 44), proceed along the more and more opening, although increasingly adventurous, path of its experience. Its need is, that it should be actualised. And therefore it cannot escape whatever tends to this consequence in it (sect. 52).

55. Such a development of the soul is not confined within the limits of *experience* ; it must also expand and extend the soul's whole thought, anticipation or conception. The reason of this extension of the soul's original principle (sect. 21) is identical with that which was formerly shown to annex to the mind a general notion of the nature of received or accidental experience (sect. 46). For difference resembles that nature in being not completely irrational, but in the measure consistent with its imperfection perfectly rational. A particular *difference* must, then, as much as any other particular accident (sect. 46), extend its influence beyond itself to the whole thought of the soul ; which is hence-forward, in consequence, able to foresee (sect. 32, 33), and to enjoy (sect. 34), to remember (sect. 35, 36) and imagine (sect. 40, 48), with its *a priori* object (*aaa...*), whatever kind of impression it may, in the course of its experience, have come to be acquainted with (*a₁a₂a₃...*).

56. These preliminary observations upon the nature of *Difference* lead me to mention some results of still greater consequence which make their appearance when, through

the operation of comparison (sect. 37, 53), its vehicles are brought now into one and now into another connexion with each other. The peculiar manifoldness, and *indeterminate-ness*, of existence which hence results :—the being of so many different things in the world ; and all that possibility of *others* which it henceforward exceeds the foresight of the soul to define or limit (sect. 32) ;—constitutes the *last* of the three defects to which impressions are, on our principles, subject (sect. 25). The account of this defect will complete the general outlines of that caricature (if I may call it so) which we are at present tracing of the first rational or *a priori* form of existence (sect. 38). It will suffice to treat of this error in connexion with the successive *alterations* which *any a priori* train of impressions (sect. 22) undergoes in the presence of differences. An example will make evident the nature of these alterations.

57. Suppose the first, or *a priori*, succession of impressions *aaa...* (sect. 22) to be the original of some sound (sect. 15) ; as the sound *C* of a horn. And suppose, also, a neighbouring instrument of its kind to produce the more resonant sound *Cf*. *C* will then, in its encounter with *Cf*, have acquired the *a posteriori* nature or quality of softness (*Cp*) ; a quality which it had not at first ; inasmuch as such a character cannot appear in *C* apart from *Cf* ; the loud and the soft existing only together, and one being unable to do so without the other.

58. The like intercourse of *C* with other varieties of impressions as variously determines its original character. *C* may be more sonorously sounded (*Cff*) ; and *Cp* will thereupon wear a new aspect :—a softness then seeming to sound *through* its softness, it will become more soft, or *softer* (*Cpp*).

59. To limit or define these developments exceeds the power of *reason*. For while *likeness* must of necessity be of

one kind only, *differences* may be of any and endless kinds. Their origin is *a posteriori*; the obstacles which they raise in the way of the soul's natural progress (sect. 51) may accordingly be of *any* kind or description. Such obstacles seem to start up in steps or grades, one higher than another. The soul apprehends the first or least of these as an order of the less and more different: as *Cp*, *Cf*, *Cff*, *Cfff*... In such an order each impression has a place of its own: the order of these accordingly in some measure recalls the order of the *great* and *small*. But this is no *quantitative* series of impressions. And the members of such an order differ fundamentally from the members of an order of *magnitudes* (sect. 23). The latter bear to one another the relation of the part to the whole or of the whole to the part; the *former* are by nature qualitatively, absolutely or simply different.

60. A further obstruction arises out of impressions *incapable* of being thus ordered and regularly assembled; as from the sound of the note *D*; which, notwithstanding, develops, with some kindred impressions (*E*, *F*, *G*), variations in *C* of a kind resembling in principle those already mentioned as set up in it (sect. 58). Thus *D* makes *C* *low*; *E* makes it *lower*: and *D* and *E* give it a place of its own in a new type of empirical *order* (sect. 59).

61. Other differences, to which further additions might always be made, at once extend and illustrate the increasing licence of things (sect. 56). The note of a *violin* being heard adds a new quality to the notes of a *horn* (sect. 57). The sounds of trumpets seem to soften and feminize them. The many effects of this kind are as varied as those changeful emotions which *orchestral* composers recall by their means. Of these diversities no such complete *order* can be found as of the high and low (sect. 50), and of the loud and soft (sect. 59); and the several tones of the *harp*, the *flute*, and the

trumpet originate no constant gradation. Although the possible variety of impressions must remain indeterminable, yet in any finite mind it must be empirically restricted (sect. 48). It culminates for ourselves in such things as *colours*, *odours* and *flavours*: impressions which seem to draw from the note of a horn its last and least accessible secrets: colour evolving one, and flavour and odour and the like, other characters, from that sound. A composer of opera employs and to some degree depends upon these surprising effects: colour contributing in his compositions to sound, and sound to colour, their rich, though unordered, contrasts.

62. What points as much to the whimsical and *a posteriori* nature of these developments is the circumstance that among certain differences likeness itself emerges. Hot and cold alike reveal *temperature*: rose and pink, *red* and *colour*; *C* and *D*, *pitch* and *sound*. The nature of these likenesses in being imperfectly rational must be necessarily as little deducible as those differences in which they appear; but it may be possible to observe in what circumstances they originate. Suppose, for example, the mind's knowledge to have been for a while *confined* to the impressions *Cp*, *Cf*, *Cff*, *Cfff*: these must then have included the whole of its experience of difference; which must thus have seemed simple, and not other than different: in all these impressions the soul would not be aware of more than the greater or less defect of the like (sect. 59). But if *D* be thereupon sounded (sect. 60), the resulting impression will appear to be, not only different, but of a different order of difference: for its difference will be such as to frustrate any attempt to assign it a place among the remainder of things. But this will at the same time follow:—the several differences *Cp*, *Cf*, *Cff*, *Cfff*, will now seem to compose a single determinate *kind*; they will appear, as well as simply or qualitatively

different, of one and the same nature. A common being will seem to permeate them, and to make them, although different, the bearers or vehicles of an identical character. In relation to another order of difference they will appear, therefore, not different, but the same. And thus the differences *Cp*, *Cf*, *Cff*, *Cfff* are not *simply* differences ; but alike, also, in having *strength* or *volume* ; for this permeates them all : *Cf* having one strength, and *Cff*, another. In a similar way *pitch* and *timbre* seem to be constituted by the different classes of difference to which the diversities of these abstract likenesses are exposed. *Sound* itself constitutes such a likeness, and has a similar origin—when the originals of any *colour*, or other quality of the kind, have been formed in the mind, the novel effects which are then exhibited in the various classes of sound (sect. 61) are accompanied by the appearance of a general *likeness* among these. If the impressions of the soul had been completely restricted to sounds they could not have then been perceived to be such. A colour, upon the other hand, having been introduced among them, such a character is then formed in them as gives this common likeness to each of them.

63. The circumstance that *greater* diversities (sect. 59) are required in order to produce likeness in *less* must involve the concealment of such likeness in those differences which at any time seem the *greatest* (sect. 61). In these the condition of the appearance of abstract likeness fails to be realised. It may thus be conjectured why colour and sound fail to disclose such a common characteristic as *C* and *E* do in their *pitch*, or *Cf* and *Cfff* in their *volume* ; for colour and sound are examples of such impressions as are in our own experience most completely unlike. It may be indeed said of colour and sound that they have *quality* ; as of flutes and trombones that they have *timbre*. But the term “*timbre*” (like the terms “*volume*” and “*pitch*”) implies a *positive* attribute in a

sound : the term “ quality ” implies only a *negative* : the name *quality* signifying in things no more than their want of a common character.

64. The soul might be supposed to be as greatly astonished at the aspect of such likeness as Admetus at the raising of the dead—

ἔχω σ' ἀέλπτως, οὐποτ' ὅψεσθαι δοκῶν.

For to surprise its true Object (sect. 24), which is likeness, in the midst of difference itself must appear to the soul a sort of marvel. No more agreeable surprise than likeness can be given to the rational soul (sect. 24, 49) ; which eagerly embracing it need no longer continue to be altogether divided from its own Object ; in all notes, for example,—*C. D. E.*, —needing to discern only pitch ; in all instruments—as trumpet, harp, or flute—timbre only ; in every sound—of sea or wind or thunder, of bird or beast—no more than sound ; in every colour—of tree or flower or sunset—no more than colour. One sound may be for the soul as another ; and one colour as another ; and, in general, *a₁*, *a₂*, *a₃*, may (if we please) be identified (*a*, *a*, *a*).

65. Although the *a posteriori* experience of the soul, of which we have now traced the main outlines, must provide the understanding with new powers and confer on it an increasing knowledge of *Existence* ; yet it cannot also fail to confuse and disorder the mind : so inconsistent is what the mind *designed*, with what chance has proved, things to be. The multitude of impressions, in the *first* place, which may now be *anticipated* by the soul (sect. 54) must obscure its natural lucidity (sect. 32, 33) ; disperse its attention (sect. 47) ; and mix and perplex its several emotions (sect. 47). Being itself a single mind still, and not a number of minds, it must be incapable of attending to one impression and at the same time of fastening its attention upon another : of

the varied multitude of its impressions it can be only imperfectly apprehensive ; and although influenced perhaps in some measure by all of them, yet it must be compelled inconsistently and partially to choose and select among them, one at one time and another at another. As various as what it expects, must be, in the *next* place, what it *perceives*, to be (sect. 34). Of that orderly series which it desired (sect. 21) it will scarcely observe anything. A motley procession of impressions will have taken the place of that rational system (sect. 22). Shifting from one to another impression, as chance or its attention determines, now it will be "all ears" and (if we may speak thus of meaningless impressions) hearing only ; but now seeing or smelling ; or now receiving some other impression ; while it inconsistently ignores many things, which neither affect its understanding nor can move its emotions. All which must, in the last place, be perpetuated in a *memory* equally put out and confounded (sect. 35, 36).

66. Such a nature, it must be owned, is very different from that which we found reason in the Introduction to expect. It cannot, it is indeed true, be denied that the principal lines of that pattern which we drew of the soul may still be discerned in it. The evident *resemblance* of features which gives to Experience and Reason a likeness as it were of near relations is not completely effaced by what distinguishes them. The *foresight* of the soul (sect. 32, 33), its *perception* (sect. 34), its *memory* (sect. 35, 36), and its *imagination* (sect. 40)—in a word its most general or fundamental features and structure, all these recall that nature which reflection gave us ground for anticipating. That the account which we gave of the primitive Reason (sect. 21, 28) was a true one might seem too to be shown by the circumstance that that part of experience which *fails* to

conform to it is the source of not the least speculative difficulties. The *origin* of experience, its *difference*, and its *indefinability*,—all these, would seem, in perplexing the mind, to furnish as many proofs of the real nature of Reason as of the imperfection of Experience. Still, so many incongruities must compel us to admit the presence at least of *defect* in existence ; and even to allow (if for a while only) a second principle of things beside that of Reason. That we must introduce a notion so irregular and irrational, may perhaps at first incline us to “sit down in a forlorn scepticism” (sect. 5). But, if we consider these matters impartially ; while we may perhaps acknowledge, like Plato, in the words of Timæus, that “the creation is mixed, being made up of Necessity and Mind” ; yet we may, I think, eventually detect, even in the *deformities* of experience, the presence of reason.

67. Desire is itself a nature likely to challenge these difficulties. Impediments tend at first only to sharpen its purposes. Difficulties give it a new impetus ; and when its designs “fail in the promised largeness,” its checks and reverses seem to its hardy temper

But the protractive trials of great Jove
To find persistive constancy in men.

Add to this what we have already endeavoured to prove, that its principle is that of Reason itself (sect. 38) ; that it is an intelligence of what *must be* (sect. 28) ; the law of a necessary existence (sect. 25) : and we may still expect to find a real harmony in the world, and a natural aptitude in it for truth. We may have confidence that Being will not surrender its necessary preference for Reason, but will continue to admit the rational soul’s original ascendancy and authority over it (sect. 1).

68. Thus, with a wider view, the prospect, not of a barren scepticism, but of a new enquiry opens before us. We have,

if possible, to determine how the ends of the soul may, after all, be accomplished in existence. What stands in the way of Reason we have already endeavoured to define : first, the *origin* of experience (sect. 42, 43) ; secondly, its *difference* (sect. 48-50) ; and thirdly, its *indefiniteness* (sect. 56-61) appear inexplicable. A true judgment must be likely to *excuse* these errors in things ; and, penetrating through their absurdity, to reveal within them properties which recall the origin, the likeness and the determinateness of the soul's original Object.

69. I shall, in treating of this necessary change in the appearance of things, speak first of the more simple attempts of the soul to recognise its Object in experience ; and then of those of greater importance. First, it would appear that the differences of things (sect. 48) assume, through the impulse of *humour*, a momentary semblance of *likeness*. Humour seems to afford a kind of fugitive *relief* from the incongruous (sect. 48). It has the property of *reconciling* the oppositions of difference ; a power of assimilating their real or apparent discrepancies. The showman's placard, "This is the largest elephant in the world, himself excepted," appears, in perverting the distinction of the *one* and the *other*, to have removed all that distinguishes them. The omnibus conductor's reply to a passenger's "We're having a cold spell"—"Yes, sir, we've got it hot," ingeniously suspends the real opposition of the contending impressions, hot and cold. In this its humour seems to consist ; and it is to this that we may, I think, attribute its peculiar and pleasant effect on us.

70. That humour has its place among the more austere forms of *Reason* will not perhaps displease those who conceive themselves to be wits. Humour might be likened to the fool of that austere company. Its vagaries, finding

or making opportunities wherever some aspect in things recalls the contrarieties (sect. 69) of *impressions*, seem only to prove the more clearly how heavy the inconsistencies of difference lie on the mind. The *simpleton* aping the *wise* ; the *female*, the *male* ; the *profane*, the *holy* : these and the like seem, in perverting the real oppositions of the world, in some measure to please that preference for the communion and simplicity of things which difference first disturbs and confuses. A pun by the use of an ambiguous word seems to make different natures the same. Parody charms, by transforming one thing into another. And is not this also the pleasure of mimicry—as when some adept mimics the looks of his friend, or walks or talks as he does ?

71. The natural attraction of the soul to humour seems to show the affinity of this principle to other intellectual conceptions of which the end is to relieve and satisfy the mind. Nothing perhaps eases the mind more than humour. The graver temper itself does not neglect it ; but often makes it its own mouthpiece. There are perhaps no great works of mankind which do not show some traces of the incongruous and of its remedy. The features of a gargoyle are as absurd as a clown's ; but they neighbour deans and bishops in cloisters and choirs :—there is a supposed reason for their impish appearance, which suits them to their august surroundings. The centaur is two natures in one ; but these are so combined in the art of the sculptor as to make the creature appear more sober than jocular. Thus are so often contrived the oddities of the *grotesque* :—a kind of centaur itself ; for it seems a creature half of humour and half of a more serious character. In a similar way men cloak the serious in *words* of humour, like Lear's fool (I, iv, 170-173) :

Give me an egg, nuncle, and I'll give thee two crowns.

What two crowns shall they be ?

Why, after I have cut the egg in the middle, and eat up the meat, the two crowns of the egg :

or they pun with dark humour like Lady Macbeth about Duncan (I, vi, 67-68) :

He that's coming

Must be provided for :

or "play on" generic or other ambiguous words ; as when the poet makes Ajax, like some quick, dexterous comedian, thus address the wisest of deities (Ajax, 91-93) :

δὸς χαῖρ' Ἀθάνα, χαῖρε Διογενὲς τέκνον,
ώς εὐ παρέστης· καὶ σε παγχρύσοις ἐγὼ
στέψω λαφύρους τῆσδε τῆς ὄγρας χάριν,

or Oedipus thus curse himself (O. T. 246-251) :

κατεύχομαι δὲ τὸν δεδρακότ', εἴτε τις
εἰς ὃν λέληθεν εἴτε πλειόνων μέτα,
κακὸν κακῶς νιν ἄμορον ἐκτρίψαι βίον·
ἐπεύχομαι δ', οἴκοισιν εἰ ξυνέστιος,
ἐν τοῖς ἐμοῖς γένοιτ' ἐμοῦ συνειδότος,
παθεῖν ἀπέρ τοῖσδ' ἀρτίως ἡρασάμην.

72. "These things are but toys, to come amongst such serious observations," but they introduce others of more importance. Reason seems to reveal its nature more openly than in humour when it finds its own Object in the *real* being of things. First, it perceives its Object in those abstract or general *likenesses* which seem designed to remedy or to relieve its confusion (sect. 64). It is evident that in its pursuit of these likenesses those qualities which disclose no trace of them (sect. 63) must be so far as possible diverted from one another in the mind : the mind must be sensible of colour *only* ; or of sound *only* ; or of scent or touch *only*. Next, since each quality, when separated, discovers, besides the abstract likenesses proper to it (sect. 62), something reminiscent of an *a priori* order of magnitudes (sect. 59-60) ; this feature will in turn attract and arrest the mind. Considering what distinguishes the different tones of sounds,

or shades of colours, and so on, the mind will attempt to make those which most clearly recall the *essence* of things (sect. 21) the objects of its simple and single-minded perception : the *likeness* in the tones of a violin and a cello it will prefer to the *difference* in the tones of a violin and a trumpet. A second principle of Reason will thus become evident to the soul ; and it will be once more reminded of its original Object. That the soul will be aware of the *harmonious* or *beautiful* will be admitted by those who conceive beauty to be that in which the one and like and the many and unlike coming into harmony excite an intellectual pleasure in the soul. The sound of streams ; the colours of sunsets ; flowers' petals ; waves rhythmically falling ;—in these and the like the principle of the beautiful may be variously recognized : for these things are such as, by their union of manifold differences, to comply with and satisfy the mind's original principle.

73. Beauty, whose power is to recall the soul to itself, completes what humour only aims at and intends. It steadies the mind's agitation ; relieves its superfluity ; and gives it respite from that chaos in which the multiplicity of things seems at first to involve it (sect. 65). In the beautiful the different seems as it were to be controlled and subjugated by the like, and one to appear through many. None of the mind's principles might seem to have a greater power over the soul than its idea of beauty. It forms the object of a general pursuit. It more constantly than humour influences the works of men. It is not less actively pursued than the causes of things. The enjoyment of the beautiful implies that the soul desires rightly, and feels those needs which its *reason* requires of it (sect. 25). Lovers of beauty are they in whom this principle of things is most active and intelligent. Their works promote in the mind a wonderful repose and freedom, and what might well

44 SOLUTION OF THE PROBLEM OF THE ORIGIN OF IMPRESSIONS

be termed *rejuvenation* of the soul ; as may be felt, I think, in the presence of such compositions as the Venus and Cupid of Velasquez ; the Singing Loft of della Robbia ; or the Santa Trinita Bridge over the Arno.

74. These different efforts of the soul seem to show how much it desires and strives to recover its rational Object. But because humour seems in the end only a sort of felicitous folly ; and the beautiful is rare, and not to be found, although desired, in all things : some more determined effort of the mind must be expected ; and some principle of Reason contrived, at once exhibiting the true form and essence of things, and not incapable of interpreting the whole of them. Such a principle must endeavour to recognise the features of Reason in all that exists, without flaw or formidable exception (sect. 68).

75. The activities which may be supposed to conduce to this end must, in the absence of any other contriver, be found in the *soul*. And the soul's present resources being considered, I think we shall find that this means alone remains to be added to those already adduced (sect. 69-73), namely, the power which the soul conceives in its self of determining and controlling its own experience (sect. 28). Some elementary considerations seem to prove the mind's power of doing this ; and in consequence of relieving the *first* of the three defects to which experience seems to be liable (sect. 68).

76. That men largely control, and, at their own discretion, *choose* their experience is a phenomenon so universal and familiar that its significance is, I think, apt to escape us. The soul has a faculty to see, hear, touch and otherwise perceive what it wills. It is not by *chance* that men enjoy the flavour

of Sauterne, or are to be seen sometimes rejecting a tumbler of water. To take or reject is their prerogative because of their power to choose their impressions. A nature completely deprived of the power to control its experience could procure for itself no pleasure, as it could avoid no pain, of sense. A complete incapacity must make its experience of all sensible existences as arbitrary as the pains are of our bodies : as irrationally as these must the features of skies or mountains or trees appear, and again disappear, in it (sect. 45). A being in such a condition must be almost entirely passive ; a pure creature of chance (sect. 42), or impotent automaton, barely resembling ourselves.

77. That we cannot with any show of reason attribute impressions to a *natural* cause, I gave ground for supposing in sect. 26. It remains to attribute them to the soul, as we have, I think, the best of reasons for doing (see sect. 28). Only this need be added to what was said in section 28—viz., that the will having now a *variety* of objects to work on, as colours, sounds and the like—the *inevitability* of its action must itself now assume a various form ; in short, the soul must now *choose* what it will produce and what refrain from producing. This added power the soul derives from chance itself. For the soul is not responsible for the *original appearance* of differences which it cannot, in fact, without experience, so much as conceive (sect. 48) : the soul is no more responsible for them than a musician (sect. 33) could be supposed to be so, for sounding the note *C sharp*, rather than *C*, because his piano was out of tune. Such various impressions having, however, once been *received* (sect. 42), may be as easily *reproduced* by the soul as the sound of *C sharp* might be repeated by our supposed musician. The soul can as certainly as he cause this or that series of impressions to appear or disappear as it pleases. I know

very well that this faculty may seem to many to be none of *our* powers. But they who think this should consider the faculty of the *imagination* : which is undeniably ours ; which likewise creates actual although fainter, because less sustained, images (sect. 40) ; and derives, finally, from the same ultimate reason (sect. 28).

78. The images of the fancy seem to spring up at the mere bidding of the soul ; but their more actual counterparts, only in company with those kinæsthetic impressions which are connected by ourselves with motions of our bodies. In order to excite some visual impression, we must raise our eyes, turn our head, or even move our whole person from one place to another. And few or perhaps no impressions at our command (other than those of the fancy) fail to imply some excitement by us of impressions typical to ourselves of motions in a free, living body.

79. It may seem, after all, then, that *natural* objects are concerned in the production of our impressions. I do not deny this. But I think the body plays a very subordinate part in the production of our impressions ; that it is no *cause* of them ; and that to think it so must put reason quite out of her true course (sect. 26). Of the *use* of the body, however, and of the reason of its presence in the chain of causation, I shall treat when I speak, in Part II, of the mind's purposes in *Nature*. The character of our *kinæsthetic impressions* may be referred to in the present part of the Essay. These, being for ourselves *associated* with the body's motions, may be as freely formed by us as these motions themselves. The movements of the body help to show us something of what the real nature of these impressions is. These motions make it evident that kinæsthetic impressions are not alike, but different one from another : they might perhaps be compared in respect to their difference to the notes of the scale or to the gradations of a colour

(sect. 60). What the soul thus excites the several letters $a_1, a_2, a_3, a_4, a_5, a_6$ might suitably symbolise ;—as when, for example, it excites such impressions as are by ourselves connected with the lifting of an arm, or the moving of a finger, or any other bodily movement : all of which involve their own kinaesthetic impressions ; a circumstance which enables, or may assist, us to judge in what position any of the limbs or members of our body is.

80. How these impressions come into relation with those qualities of taste, sound, colour and the like, which have been mentioned as in some sense depending upon the *soul* for their existence (sect. 76, 77) may perhaps best be shown in connexion with certain *interruptions* or *checks* which the soul is accustomed to meet with when exciting its kinaesthetic impressions. The obstacles which form the ground of these interruptions are similar in nature (although not identical in their results) with the impediments which *difference* was, in sect. 53, described as interposing in the way of the soul's progress. I shall explain myself by supposing the aim of the soul to be to form such a series of kinaesthetic impressions as $a_1, a_2, a_3, a_4, a_5, a_6$ (sect. 79). When she may, once or twice, have actually given effect to this purpose she may at a third attempt be surprised by an obstruction (sect. 53) : some *alien* impression (a_1) rising in the soul, may have assumed the place of the expected impressions a_5, a_6 . The alien impression which is acquired is an impression of *form* ; and not a *kinaesthetic* impression. The soul's smooth course will thus have been disturbed and arrested.

81. Our going into a dark room and feeling some unknown object in it may give us an idea of the experience which the soul now receives (sect. 53), and may itself presently reproduce (sect. 77). At first some feeling of bewilderment, then rather of wonder, surprises us. A desire to examine

replaces the impulse to remove or to avoid the obstacle : we curiously consider it ; judge whether it be large or small : hard or soft ; of this kind or of that. It is thus with the soul ; which, *substituting* (sect. 53) the impression of form a_1 , for the *kinæsthetic* impressions a_5a_6 , begins to make the succession $a_1a_1a_1\dots$ (sect. 32-36) the object of an independent inquiry ; she gains her first intimate knowledge of the *terms* of that series (sect. 58, 59) ; perceives the presence within them of *related* (sect. 57) *surfaces* : conceives their *third dimension* ; and, yielding to the influence which must then be excited in her, entertains the *a priori* ideas of the larger and the larger on the one hand, and the smaller and the smaller on the other (sect. 23) ; together with the *a priori* consequences of these notions (sect. 23).

82. Such an experience becomes the mainspring and chief means of the mind's subsequent progress. It is itself the type of other experiences which resemble and repeat it. The series $a_1a_1a_1\dots$, which the soul has come to control, is the precursor of similar series (themselves liable to an *a priori* connexion with it (sect. 81).), which the soul may as easily reproduce ($a_2a_2a_2\dots : a_3a_3a_3\dots : a_4a_4a_4\dots$). If some of these series may seem, from time to time, to elude the mind's control, yet there is none which may not in the end be recovered, or be deemed to be recoverable, by it. Nothing shows more clearly the importance to the soul of its control of these series of impressions than the revolution, in their favour, of its interest in those which assist in their production (sect. 78) :—*Kinæsthetic* impressions are employed henceforth for *their* sake and, like menials whose occupation scarcely attracts their master's notice, pass out of *mind* (sect. 33), work unregarded, and continue to be active only in those unconscious *habits* which we observe in ourselves when we excite the motions of our arms, hands, legs and

other parts of our body ; all without attention to, or interest in, their active proceedings.

83. The command of impressions of form leads directly to the manipulation of those other impressions which we are accustomed to control (sect. 76). There is an empirical and natural, although not *a priori*, connexion between the prototypes of body on the one hand and those of temperatures, odours, flavours and the like on the other ; and the soul is no sooner studying the former (sect. 81) than the latter are at the same time excited in it. Thus it gains from its faculty of producing impressions of form that power of choosing *other* qualities which makes men so often the arbiters of their experience (sect. 76).

84. That arch-impression which forms the prototype of body (sect. 80, 81) maintains the causal primacy which it has thus acquired among impressions by its further connexion with qualities of sounds and temperatures and the like which, although engenderable, yet cannot be *directly* derived from it. While it is impossible to taste or weigh a thing without feeling it ; yet a multitude of sensations exists of odours and temperatures, and of sounds in particular, which are not united with any sensation of *body*. These loose *sensations* serve to show how *impressions* (sect. 15) unite with this independent character that of being, at the same time, *dependents* or *signs* of other *impressions* of their own kind ;— of which some impression of *form* may be then always assigned as the ground. Thus *fainter* (sect. 5-9) temperatures, odours and sounds of physical objects are by the means of such independent impressions (sect. 15, 18) discerned by ourselves to be signs of stronger and more *significant* temperatures, odours and sounds ; which are themselves discerned to be directly associated with a natural body.

85. Of these conclusions the prototypes of *colours* offer a more general exemplification and proof. And it may be thought that, had there been *other* qualities known to us (sect. 61), they too would have followed the general law (sect. 67). The prototypes of colour are, like others, at first without a necessary connexion with those of *body* (sect. 83). The appearance which they present is of a flat *field* of colour, which exists in the *soul*, like other impressions (sect. 34). No voids or gaps deplenish this field ; but a promiscuous medley of hues, of which the forms and shapes (sect. 23) are outlined by the difference of the shades, covers the surface. The character of these tones might be compared to that of the colours of a painter's palette, or of a futurist picture : being *simply* colours, they represent, at first, nothing. This multiplicity of colours then however acquires, with other qualities, an empirical connexion with impressions of form (sect. 83). And these forms become the natural sources whence the colours may be outlined at will, and made or unmade, by the soul. *Such* colours are, in general, the brightest, and those which seem to be most directly associated with the form. The majority of colours are, however, no more than the *signs* of *these* colours (sect. 84) ; for very few of the shapes and colours that we commonly see are those which we attribute to bodies. Thus, for example, the colours of a remote prospect of *trees*, *meadows* and *streams* :—such colours are, in themselves, not *theirs*, nor shades or colours of anything ; but *signs* of colours brighter and of another outline ; and having a connexion with and flowing as it were from the respective forms or body of these things.

86. The correction of the *first* of the three errors of experience (sect. 68), which has now been considered, leads, in the next place, to the amendment of those which spring from this error (sect. 48). A knot may sometimes

seem to straighten itself when a single tangle has been undone in it. And it is thus with the soul's experience, which is no sooner *controlled* than it seems ready to assume of itself features recalling that *a priori* *simplicity* and *determinateness* which are natural to things. As to our theory it is essential, so it will, I think, be found true to fact, that the rational *activity* of the soul has the consequence of engendering an experience which is in other respects rational. I say that from an active or *teleological* category (sect. 28) there issue spontaneously experiences in which *other* categories may disclose a *simplicity* and *determinateness* impossible to a world arising from mere *chance* (sect. 42). These *supplementary* categories (of which we have next to treat) differ in character from a *teleological* principle. It is the nature of these catagories to *assume* that material which the will itself actively engenders ; their activity originates with a bare *observation* of effects for which they cannot *themselves* account ; and only thus can they develop those consequences in things, in which they are interested. Such principles I shall call *passive* or *deterministic*, in order to distinguish them from the active or *teleological* principle of the will.

87. As to that defect, in the first place, which the will's incapacity *originally* imposed on the soul (sect. 48)—namely, the *difference* of impressions, this must now be expected to assume the form of that likeness which it is the will's nature to imply (sect. 48). I do not say that differences must, by some magical process, be reduced to a mere *likeness* ; but that they must, rather, be so disposed by the will that reason, upon taking an observation of them as they arise in the mind, shall be competent to detect in them a single, unique Object.

88. An actual trial of this being made, such an object

does in fact seem to emerge from things somewhat as the hidden figures of men and animals from those ambiguous pictures which puzzle children. For consider the present case of the *series of form* $a_1a_1a_1\dots : a_2a_2a_2\dots : a_3a_3a_3\dots$, etc. (sect. 81, 82) :—it will be observed that these series, in serving as the perpetual *causes* which unite the differences of colours, sounds, scents and the like with themselves and each other (sect. 83, 85), have become objects which these impressions of colour and the like now constantly *mean* or *imply*. In short, a *single, dimensional Object* ($a_1a_1a_1\dots : a_2a_2a_2\dots : a_3a_3a_3\dots$) (sect. 81, 82) is presented to the mind through *all* her impressions. Thus the colour and sound of a river, the scent of a flower or the flavour of a pomegranate signify for ourselves that part of these objects which we can feel and handle. Those qualities are called the colour and sound of the *river*, the scent and flavour of the *flower* and the *pomegranate* : and so in all other instances. In short, our impressions are absorbed or inhere in a single substantive form ($aaa\dots$) ; and, being (as they are termed by ourselves) its *adjectives* or *attributes*, have become, through our interest in their meaning, *one thing* with it.

89. Differences, having thus surrendered that *alienation* which their character as differences or qualities (sect. 63) originally imposed upon them, have thereby been universally determined to a single, although manifold and corporate (sect. 81, 82), form. They exist now only in reflecting that being of which they have become attributes ; and losing *their*, have assumed *its*, character. The soul by her constant apprehension of *it* in *them* has permeated them all with one homogeneous nature. The sounds of language are not more full of the thoughts which they symbolise than these qualities are of the nature of form. *Form* revises the heterogeneous nature of every quality : as that of *sound* ; which, having no dimensions of its own, yet acquires

determinations which our subsequent *sense* (sect. 15) refers to the continuous parts of a physical body : so that we seem to hear what we touch. *Form* determines the quality of *colour* ; which having two dimensions (sect. 85) acquires the spatial attributes of a third (sect. 81) ; by this attaining depth in addition to length and breadth ; although depth in itself is as much invisible as it is inaudible, inodorous and tasteless. By *form* the other qualities dilate and become voluminous ; voluminousness being in the words of James (*Principles of Psychology*, ii, 135) "discernible in each and every sensation, though more developed in some than in others." Through *form* the attributes themselves fuse and mingle with one another ; an impression being permeated as well with the *acquired* as with the original properties of *form*. For example, in saying that water has a cool *sound* or that fire has a hot *look*, we imply that the sound of the water or colour of the fire is permeated, not only with the dimensions of *form*, but with the properties of coolness and heat which these dimensions have acquired.

90. The result of this universal union being that the many become *one* ; the plural, *singular* ; "are," "is" ; it will, I think, be evident that Reason has successfully traced the figure of Likeness in the picture of things : and, as she passes at pleasure from one to other impressions (sect. 76), has distinguished in their heterogeneous outlines the form of one pre-eminent quality ;—which moulds its attributes to its own shape ; imparts to each of them its own simplicity ; and fails not then to overrule the confusions at first apparent in things.

91. That the prototypes of colours, sounds and so on, like synonyms re-iterating a single meaning, imply *one* being, will be, I think, clear to anyone who in some country lane may stop to listen to the songs of larks and to breathe

54 THE SOLUTION OF THE PROBLEM OF INDETERMINATENESS

in the odours of flowers. There is no confusion in his mind ; but through each impression he perceives the *form* of the world (sect. 81). If he had never learnt through form to organise his *control* of impressions, these must have maintained in his mind a substantial and divided existence (sect. 48, 53) ; and, each in its own world, have left his intelligence disorganised and incapable. That a *material cause* or *instrument* must assemble (sect. 83), be *implied* by (sect. 88), and thus, in the end, *identify* (sect. 89), his impressions ;—this is accordingly consistent with Reason (sect. 38) ; the law of all things, and that to which all, in virtue of their essence, naturally respond (sect. 67, 86).

92. We have seen that Impressions are not uncontrolled ; nor differences unassimilated. It remains to conclude how experience provides the condition of the *last* of those characters which reason requires of things ; namely, some limit of their limitlessness (sect. 56), which may restore to the mind her original power of foreseeing and determining the nature of all possible existence (sect. 32). By the principle of sect. 86, experience must be thought to offer the inevitable means of doing this.

93. And an examination of those substantive-impressions (sect. 88) which the soul is constantly *forming* (sect. 83) does not fail to discover within them a peculiar *capability*, on the one hand, as, on the other, a corresponding *incapacity*, which may admit of the mind's forming such a limit about experience as is necessary. This disposition of things is one which is present in every individual series formed by the soul ; viz., that the like are completely alike, and the different, completely different. For a number of qualities being united in any of the things that the mind can observe (sect. 83) ; yet we perceive these qualities only in particular

combinations, and they are never promiscuously intermingled. And this is true however many things are brought into view.

94. That such *self-limitation* of things restores to the mind something of that power which her essential being implies (sect. 32), of predetermining the nature of all possible existence, is evident from the principle which may be laid down on its basis. This principle is one which may be expressed in the familiar terms : Like causes (sect. 83) are universally connected with like effects ; and like effects with like causes. A double principle, in short, may be constructed to this purpose, namely, that a form a_1 shall invariably and whenever it appears involve such qualities of odour, colour and the like as are peculiar to it ; while these effects in turn involve the cause a_1 : and thus with every other cause— a_2, a_3, a_4 , and so on indefinitely. This principle will then restore the mind's provision to the extent of guaranteeing the following predictions, viz., that the effects of a_1 will occur with a_1 , and not with a_2 or a_3 ; and the effects of a_2 with a_2 , and not with a_1 or a_3 ; and so on in all other cases. So also with the causes :—from the presence of a colour b_1 , I may now predict the form a_1 , and from the scent c_1 , the form a_2 , and so on generally. Some qualities will, then, communicate with some, and others not, and everything whatever will have “its own determinate Idea which is always one and the same.”

95. This principle, while it serves the same general purpose as those principles which have now been examined, of revealing the essential form of existence, is yet in this respect distinguished from them, that its content is not, as theirs is, *particular* ; but general, inexact and indefinite. The ambiguous significance of the term “like” (sect. 55) which figures in it ; though well contrived to cover, as it is intended to do, the illimitable range of existence (sect.

56); yet of necessity imports some doubt into its *particular* and *special* significance. The principles hitherto referred to were for their several purposes complete in this particular; they did not, then, require to be *supplemented* from an external source. But something is needed in the present instance to assist in determining of what *sort* those combinations shall be which this principle typifies.

96. To this extent therefore Experience *itself* must unusually co-operate with Reason, by assisting in the transposition of this principle into those multitudinous *definitions* which constitute the specific forms of the world. First *observation* leads to the assemblage of *particular* congeries of like attributes (sect. 93); then these *a posteriori* combinations become, at the *mind's* instance (sect. 67), *a priori*, necessary or apodeictic: till, by the definitions thus formed, the nature of all things that are and that can be is directly determined. Definitions are thus forms of Reason *rational* at once and *a posteriori* or empirical. And it is by the necessary subjection of things to them that the individual successions (sect. 89), produced by the soul or capable of being produced by it, become the members of a Form, Species or Idea. That the actualisation of this principle requires an outward prop to rest on is not without a further consequence for knowledge. The part which *experience* must play with this principle portends and explains that element of uncertainty which always attends the results of an *inductive* method. That wheat should be yellow, lemons bitter, or sapphires hard—all this is *of itself* in no way more necessary than that the creations of the fancy—as the unicorn, the “winged steed,” or

men whose heads

Do grow beneath their shoulders,—
should be inadmissible.

97. The regular arrangement of qualities in the world, which this principle looks for, must greatly surprise any *sceptic*, who reflects upon it. For certainly it is impossible, upon any theory of *chance*, that experience should satisfy the mind in so many particulars (sect. 94). The surprising order which we actually find ; the regular coincidence of qualities with qualities ; the *types* of things thus formed ; the power so given us of using a specific language ; in a word, our *a priori* knowledge of whatever exists or can appear to us : all this, which if it had not been so completely assured, we might doubtless have wondered at, seems to afford a further proof that Reason (sect. 38) forms the real ground of experience, and is that by which all things whatever consist (sect. 68).

98. A curious examination may, indeed, discover some licence in things ; which, although different, may yet at times combine the same attributes. Many objects, for example, are the same in weight or temperature ; a few in sound, taste, or smell :—"the hot smell of pines (says, for example, one observer)—just like blackberries." While like effects would seem from these instances sometimes to be derived from unlike causes, it more rarely occurs that like *causes* determine their effects inconsistently.

99. The definitions of things would seem to be no more disturbed by this error than they are by a second which accompanies it. I shall try to explain the relation of this defect to the first by supposing *one* substantive-impression (sect. 89) to be symbolised by the letters and numbers $a_0b_0c_0$, and a *second* by the letters and numbers $a_1b_1c_1$; the symbols signifying in the one case as in the other the qualities of form (which implies shape and size) and taste and colour, but these being different in each, as they are for instance in an apricot and a peach. By sect. 94, a,

being then the cause of b_0 and c_0 ; and a_1 the cause of b_1 and c_1 : the consequent fulfilment of the principle of causes with respect to the two species referred to will not prevent the existence of caprices *within the limits* of either. For it may happen that the manifold differences of the soul's impressions may include many that are neither a_0 nor a_1 , nor b_0 nor b_1 , nor c_0 nor c_1 : but which may be symbolised by any of the fractions that lie *between* zero on the one hand and unity on the other. It may follow that the substantive impression $a_0 b_0 c_0$ being repeated in a new individual (sect. 93), may not catch the precise likeness of the original. For while it may, indeed, possess none of the characters of the individual $a_1 b_1 c_1$, $a_1 b_1 c_1$, $a_1 b_1 c_1 \dots$; yet it may not, on that account, successfully copy the individual $a_0 b_0 c_0$, $a_0 b_0 c_0$, $a_0 b_0 c_0 \dots$. The symbols $a_1 b_0 c_1$ or $a_0 b_1 c_1$, rather, might symbolise it. It follows that b_0 may in *one* instance be derived through a_0 ; but in *another* through a_1 . Which is contrary to the principle that like effects are to be connected with like causes (sect. 94). a_0 , again, may be in one instance connected with b_0 ; but in another with b_1 . Which is contrary to the principle that like causes must be connected with like consequences (sect. 94). In a similar way the system $a_1 b_1 c_1$, $a_1 b_1 c_1$, $a_1 b_1 c_1 \dots$ may be a unique individual, and without a counterpart in the world. For it may possess none of the characters of the system $a_0 b_0 c_0$, $a_0 b_0 c_0$, $a_0 b_0 c_0 \dots$, and it may equally exclude all the varieties of that system: and yet it may vary in its own especial and individual manner—as symbolically in the form: $a_1 b_1 c_1$ —or $a_1 b_1 c_1$. It may thus happen to the most eminent logician to be deceived by the samples of a fruiterer's basket. "The ideas" he may presently "be affected with" prove that there still remain in the world some traces of indeterminateness—

caprices, it is evident, which when externalised in the Natural World, are called *accidents* of species.

100. The dependence upon *experience* of specific definitions (sect. 96) involves that the prevision to be attained by their means can extend only to such things as *resemble* those with which the soul may be at any time acquainted (sect. 48). Experience is, however, by its nature indefinable and illimitable (sect. 56). There remains, then, a need of *other* Ideas to bring into view the nature of *whatever else* may lie behind the veil of the future (sect. 65). This purpose is fulfilled by *generic* definitions ; which, by adding to the *a priori* knowledge of things already exemplified a prophetic and as it were Delphic insight into such as are yet unknown, serve to complete the soul's present design, of pre-determining the nature of all possible existence (sect. 92).

101. The principle from which specific definitions proceed has been shown to depend on the *likeness* of things (sect. 96). Likeness must accordingly form the natural root of those definitions which are to supplement these specific Ideas. And the unknown individuals, of which it is the soul's present aim to determine the pattern, must possess some likeness to existences already received and known by the soul.

102. And that likenesses inclusive of differences equally unknown as known do exist in the mind was shown in sect. 62, 63. Thus blue and yellow being each *colours* ; *C* and *D*, each *sounds* ; hot and cold, each *temperatures* ; and one or several forms of likeness occurring in each kind of impressions ; there exists in these natures what, without destroying, seems to absorb and in some sense to supersede as much their unknown as their known differences.

103. It follows that any definition which has been at any time formed in the mind (for instance, a, b, c, \dots) ; having been modified and considered as abstract (a, b, c, \dots) ; has a wider *range* than before over experience : as over a, b, c, \dots For not only are such elements as are at any time to be found *resembling* its own (viz., a, b, c, \dots) determinable by it : but such too as may *vary* from them (viz., a, b, c, \dots). The qualities a, b, c, \dots might differ from anything the soul had ever perceived. And yet it may successfully secure itself against their appearance ; catch their true essence in the web of its definition a, b, c, \dots ; and satisfy its reason in respect to them (sect. 97).

104. Such excursions of Reason behind the horizon of the soul's *actual* experience must depend for their extent upon that of the abstract likenesses which, being subject to the principle of Cause and Effect (sect. 94), are at any time to be found in impressions (sect. 101). The diversity of such likenesses is therefore favourable to these movements of Reason. Every attribute maintains a variety of abstract likenesses. Thus orange, gamboge and saffron are *yellow* : yellow, crimson and violet, *colours*. The differences of sounds, tastes and odours are likewise assimilated by their respective likenesses. Nor are the diversities of *form* deprived of such likenesses. *These*, although of more rational origin (sect. 81), yet agree with empirical differences in presenting to the soul a number of general likenesses, of size, pattern and proportion.

105. As the variety, so also the *relations* of these likenesses must be comprehended in the definitions of things. The same impression may be conceived as *more* and as *less* abstract : and so, then, may those *combinations* be conceived which impressions form. Colour *co-exists* with yellow, crimson and violet ; the outlines of quadrilateral figures,

with those of parallelograms and trapezia. Each several thing thus participates in a variety of *definitions* ; which as many different names, like "quartz," "crystal," and "mineral," name and designate.

106. This peculiarity of definitions leads to the final form of that Category of cause and effect of whose determinations we are treating. Every abstract likeness being a likeness among a number of differences ; and *colour* thus embracing every instance of blue and yellow, but not blue and yellow every instance of colour ; and *figure*, again, embracing every instance of circle and triangle, but not the circle and triangle every instance of figure ; and temperature and weight and smell and taste in the same way embracing what cannot embrace *them* ; it follows that such a genus as is defined by colour, figure, smell, taste and so on, must embrace such others as the qualities yellow or blue, circle or triangle, or the like, co-operate in *defining* ; but cannot be embraced by them. A multitude of abstract genera may accordingly be united and compounded into one of a more abstract kind still, as the intelligence conceives them under the more abstract attributes ; while now they may be, as it were, unfolded out of the one, as it conceives them under the less abstract.

107. It follows that this Category implies a genus which, inclusive of all others, cannot itself be included in any. This Idea must enclose the most general cause and its effects ; and become the essential principle of the rest. Such a genus ;—which the prototypes of figure, colour and the like will aid in defining ;—when combined with the inferior genera, will become the head of a natural Order ; which, upon receiving species in turn into it, will constitute a general *classification* of all possible existence : the intention and result of which is, by exhibiting in a system of definitions

the whole hierarchy of causes and effects, to sweep as with a sort of net the illimitable ocean of Being ; and bring into the thought of the soul the general nature of such things as she has not yet the least experience of (sect. 92).

108. And thus the intention of the soul is accomplished with a view to which this category was contrived. While a more restricted experience might no doubt have admitted a more concrete determination of things, yet no principle can be conceived better devised to control their unbounded variety (sect. 61). A classification affords a natural system of inference or *divination*. Its dominant Idea, in ranging most widely over existence, has the property of defining the nature of all that shares those summary attributes which compose it : those Forms which, determining this Idea with various differences, as variously interpret its ambiguous significance, combine with their inferior range a more precise power of restricting the licence of things : until Species with a multitude of related, although independent, interpretations seem to unravel the unambiguous meanings of its sovereign oracle. A classification is a true instrument of science ; and whatever shapes a classificatory system assumes, it fails not, in relieving the mind of that bewilderment into which a world without species must throw us, consistently to discharge its function of restricting and defining existence. A botanist, relying upon its principle, is able, when encountering new orders, genera or species, to affirm at once what they are and what they are not, in the ordered system of his knowledge. Their abstract essences have already determined in his understanding what their nature must be. Whether they are nearly related to each other, or are only "cousins," is known by the properties of reason to him. These and the like operations of the mind may be compared to those which are described by Plato in a familiar passage of the *Republic* : in which he speaks of

the soul as using the innumerable species as " steps and points of departure into a world which is above hypotheses, in order that she may soar beyond them to the first principle of the whole " ;—which done " she clings to this and then to that which depends on this " ; and without abandoning the principle which rules and lights the whole, " by successive steps descends," and returns again to the points of her departure (p. 511 ; trans. Jowett).

109. Having now, so far as I could, successively determined how the three necessary virtues of existence, like the trio of its Graces, appear in experience :—how the engenderable emerges from the unengendered ; the like from the unlike ; and the determined from the undetermined : I leave it to be considered whether we may not perceive in the features of that confused experience which was described in sect. 39-65 something reminiscent of the original Object of Reason (sect. 24, 28, 32). If the example seem to be the more simple and regular : yet in the copy there will be found, it will be allowed, something more profound and more arresting. The first might perhaps be compared to some severe construction of Greek architecture ; the second to a more sublime, although ruder, building of a Gothic architect. The soul, when reviewing this rational structure must be inclined to see in it a new, if unexpected, expression of reason itself (sect. 38) ; and by new desires to signify her acquiescence in, and consent to, a world so supported. Notwithstanding, this structure has, like the first intellectual Object of the soul (sect. 24, 28), its own proper defect ; the character of which must form the subject of our next inquiry. The discussion of the *remedy* of this error, which our principles make likely (sect. 67), will follow ; and with this we shall conclude the first part of the Essay.

110. The power of the soul (which we have, in the preceding sections, maintained and insisted upon), of controlling her varied impressions (sect. 28-30, 77) is the foundation upon which that reasonable structure which we have just completed has been shown to stand. See sect. 86. This power is the source from which there evidently flows into the soul the chief part of her experience (sect. 76); and by the means of this power that is being continually formed in her which makes her in other respects a rational creature (sect. 91, 97, 108). We must now notice what has perhaps been the chief cause of our neglecting or altogether denying the power of this principle (sect. 29), namely, the important qualifications which detract from, and go far to contradict, its activity. In short, the appearance of unexpected, involuntary *differences* in those successions which the soul appeared to have mastered seems once again to enslave her to *chance*. Successions of impressions ($b, b, b, \dots : c, c, c, \dots$; etc.) are, in a word, being constantly modified (b, b, b, b, b, b, \dots), or even for a while brought to an end (c, c, c, c, \dots), without the soul's design or intention (sect. 53).

111. The changing colours of a flower; the varying temperatures of bodies; odours which come and go; the ebb and flow of sounds;—the different sensations of these things which we are here considering as no more than impressions (sect. 15); all tend, it is evident, to reduce the power of the soul almost into that state of impotence which seemed originally to characterise her (sect. 48).

112. Imagine mountains, plants, men, houses or anything else whose permanence was expected, apt at any time to expand or contract, or otherwise change, before our eyes. We should, in a world so extraordinary, be in doubt not only of our capacity to see things when we *chose* (sect. 76), but even to recognise their *substantiality* (sect. 91), and *species* (sect. 97). It is true that *some* active power

is implied in the very notion of *Change* (b, b, b, \dots) :—we could never, without some original *control* of impressions, have judged this one or that to *belong* (sect. 22) to this or that *train* of impressions (b, b, b, \dots)—impressions must have seemed, rather, altogether isolated from and independent one of another (sect. 42, 48) : $b, \dots ; b, \dots ; b, \dots$ Still, this dependence of change upon the will will not secure the stability of a structure which is founded upon the will's consistent operation (sect. 110). That system will not survive a perpetual interruption of its principle. Reason which seemed permanently settled in the world (sect. 109) must seem, with the re-appearance of *chance*, to be again removed from it. We must once more admit a participation in things of that *Necessity* which is opposed in the *Timæus* to Mind (sect. 66). Such an admission, however,—in reintroducing into our thought those cogent reasons which must be set off against any permanent scepticism (sect. 67), can only bring its own doubt into discredit. Though experience may seem to have been less rigidly constructed than altogether to preclude its relapse into its original chaos (sect. 65) ; yet, as Reason might be expected to overreach the primitive defects of experience (sect. 39-65) ; so some end of these present difficulties must be surmised :—we must be as much convinced of Reason's part in these things as surprised at their apparently marvellous nature. As the mind gathers strength scepticism must grow more and more alien to her. Her natural confidence must be renewed by that faith in Reason which is the first mark of her nature. We can only suppose that such a principle must exist as by its reasonable operation will renew that harmony of experience with the mind which is required (sect. 67).

113. The soul's own development having culminated at this stage in two different, although interconnected, forms

of conception :—one, passive or deterministic ; the other, active or teleological (sect. 86) ; it may be supposed that either of these forms may interpret the mind's present perplexities. It might be thought, in accordance with a simply *deterministic* principle, that the differences to be successively noted in things (sect. 110) are subject to the principle of cause and effect (sect. 94). One substantive-impression (a, b, c_1) might be considered the necessary *ground* of its successor (a, b, c_2) in the series $a, b, c_1, a_2 b, c_2, a_3 b, c_3 \dots$. The sensations we may have of a changing tree, flower, or animal, might be considered to succeed one another in a determinate and regular order. And it need not then at first sight seem more mysterious why things should change from one form into another than why one should always be of one, another of another, colour, smell, and figure (sect. 96).

114. The presence in things of the category of cause and effect is marked by the power which it confers on the mind of foreseeing or divining them (sect. 94). Its activity being therefore of a kind to result, in the present instance, in the complete *determination* of the course of experience, it must be as possible to foretell by its means what shapes things shall assume ($a, b, c_1, a_2 b, c_2, a_3 b, c_3 \dots$) as what, without change they would have continued to bear ($a, b, c_1, a, b, c_1, a, b, c_1 \dots$) (sect. 92). This function determines in what manner the requisite co-operation of *experience* with this principle may embody those definitions which constitute the specific forms of this mode of reason (sect. 95) :—While a number of changeful successions ($a_{3456}, a_{3456}, a_{3456}$) (sect. 96) might lead to the formation of a definition (a_{3456}) competent to determine any *incidental* part of their course ($a_{xxx3456xxx} \dots$) ; it is necessary for things to show evidence of a *recurrence* or *cycle* changes ($a_{3456}, a_{4563}, a_{5634}$) in order to support a definition (a_{3456}) of a kind able to determine their change *without limit*.

($a_{345634563456\dots}$) :—for changeful successions, from containing an unlimited number of parts ($_{12345678\dots}$) (sect. 32-36), can only contribute the instances which a principle of cause and effect must depend on (sect. 96), by submitting themselves to some ascertainable *limit* ($_{3456}$). It is a circumstance tending to throw a light on the nature at once of Experience and of Reason that such cyclic individuals as the present principle must rely on make no appearance in the mind. If things may be found not incapable of becoming the objects of definitions determinant of a *part* of their course :—as the bodies of plants or animals (the changes of which follow for a time a predictable course); yet even to *their* regular growth there exist innumerable exceptions. And the great majority of objects discover no definable limit of change, appear variable and incalculable, and wholly subject to Chance (sect. 42).

115. That the former *reason* of things rested on the soul's rational *control* of them (sect. 86); and that it was the removal of this control which allowed them to fall into disorder (sect. 112); confirms the conclusion which now remains, that change must have some connexion with a *teleological* principle. Some evident considerations seem to make plain the nature of this connexion. For the fact that those uncontrolled *differences* which occur in trains of impressions (sect. 110) revive the problems of the *origin*, the *difference*, and the *indeterminateness* of experience (sect. 68, 112)—must suggest to the mind the experiment of applying to *each* of such varying trains (b, b, b, \dots) those principles of reason which were before applied to trains of impressions *collectively* ($b, b, b, \dots ; b, b, b, \dots$, etc.) (sect. 75-109). I say that the profound resemblance which has appeared between the disorders of the present (sect. 121), and the primitive (sect. 42-65), states of experience cannot but be thought to

imply as profound a resemblance in those *reasons* which either state of experience must agree in requiring (sect. 67). Each must, in short, be subject to the same categories ; and a *teleological* principle accordingly bring either into conformity with Reason, at once by *its own* operations, and by preparing the way for the deterministic principles of *substance* and *species* (sect. 86).

116. It may, therefore, be considered a *first* proof of the activity in change of a teleological principle that the prototypes of *substances* are as much in evidence in this world of change as in that which was conceived to be constant (sect. 109). Impressions continue to imply a single existence (sect. 91) ; our *sensations* (sect. 15) of things, in consequence, signify one nature (sect. 91). Change does not disband the *attributes* (sect. 88) of things ; and there springs not from the changing child of Leda a *chaos*, but the form of the visible *Helen*. If, without the attraction of Reason, the attributes of things must again have fallen altogether apart (sect. 53, 112), yet it needs only to suppose a power in the soul of remoulding the forms (*aaa...*) of her objects (sect. 81), and it may then be explained how it is that the attributive qualities, by a natural connexion with those forms (sect. 83), introduce the conditions necessary for the formation of one into other individual things (sect. 89).

117. It is, in the *second* place, no more surprising that buds should become *blossoms* : children, *men* : or pupæ, *butterflies* ; if the same active principle has at the same time evolved in experience such substances only as shall fit things to become, through the principle of cause and effect (sect. 94), the members of *species* (sect. 96) and *genera* (sect. 100). While change must, without this determination (sect. 92), have produced individuals as monstrous as were ever supposed by Empedocles—

πολλὰ μὲν ἀμφιπρόσωπα καὶ ἀμφίστερα φύεσθαι
βούγενῆ ἀνδρόπτωρα, τὰ δὲ ἔμπαλιν ἔξανατέλλειν
ἀνδροφυῆ βούκρανα—

yet change cannot arise out of the soul's ends and by her means without limiting itself (sect. 93); assuming determinate forms; and admitting of that classification of all possible experience that directly depends on these forms (sect. 108). That causes, thus confined within the limits subject to the mind's direct influence (sect. 83), may interpret experience; while those which ignore this limit are unable to do so (sect. 113); may be considered the *second* essential proof which must be looked for of the activity in change of a teleological principle.

118. If we consider the concurrent testimony of these principles, we may;—while surmising the soul's *desire* of existence (sect. 24) to be the efficient *cause* (sect. 28) of that change which so wonderfully enriches and consummates her experience;—endeavour finally to prove her desire to be such a cause by adducing evidences of the mind's *direct* interference with things.

119. And that such evidences exist and add their part to the hypothesis that the soul itself must be the first cause of its changing impressions, may seem perhaps uncertain only to those inclined at all hazards to favour the claims of a deterministic principle (sect. 114). For instances to such purpose occur in the power which the soul has of awakening in itself impressions typifying for ourselves the motion of a natural body (sect. 78). Sounds may certainly, and colours and scents probably, owe their origin to this agency: thus men *speak*, the chameleon changes its colour, the musk-deer his odour. And it is, too, to the soul's contrivance through motion that must be attributed the forms of all *artificial* devices—objects which, in endorsing a

teleological, seem as plainly to refute a deterministic, principle (sect. 113), as a ground of change.

120. We should, however, evidently presume on this appearance of things if we were to contend, on such evidence, that the soul must be accounted the cause of all the changes that come to its notice (sect. 111). It needs only a brief acquaintance with experience to show that I am *myself* not the cause of all the changing sensations that I have of my own or of other bodies. This must be a cause of perplexity if the whole of our experience lay already completely before us. But it may be thought that the intervention of things *independent* of the soul—of such, that is, as are no longer *impressions* (sect. 15), may enable the mind to see in her changing experience further evidences of a teleological principle. What may be taken as a *present* proof that the change of things does not arise from any unintelligent cause, but by the device, and in pursuance of the purposes, of the *will*, is the concordance of change with those deterministic principles which the will itself implies (sect. 116, 117). We may, by entertaining the changeful *substances* and *species* of the world to be the signs of the mind's activity, suppose a teleological principle to be at the bottom of change and, with this presumption, await the further evidence of its agency in experience.

121. I here conclude the description of the soul's *first* Object (sect. 21, 28). We have at present only attempted to determine the nature of the soul so far as its *Impressions* (sect. 15) furnish the materials of its experience. In doing so we have found reason to suppose the mind to be, in *origin*, nothing but a pure, creative principle (sect. 24, 28); of which the aim and end is satisfaction through the possession by it of a perfect Actuality. This purpose led the Mind, we

saw, at first into the most various difficulties ; for what we termed the works of *Necessity* (sect. 67) were shown continually to thwart her, and to disturb her intention ; although they only made her the more active to contrive such principles (impossible without these hindrances) as might most nearly tend to conform to her first principle her real or seeming evil. Thus transforming experience, and being in turn transformed by it, she gradually produced those *a posteriori* or *remedial* categories of the Reason which we have been examining :—categories of will, of substance, and of cause and effect ; which, being derived, as they must be, from *reason*, yet spring not, we have seen, from reason's *sole* act, but in the course only of her encounter with a defective *experience*. Our account was concluded when this constitution of things (sect. 109) was itself shown to be subject to change ; and when we intimated what the remedy of change might be conceived to be. A general review of the whole subject, gives us, I think, good ground for believing that the method of philosophy we defined in the Introduction (sect. 1-6) is no illusory fancy : that an original impulse or *Desire* (sect. 7) does exist in the mind, competent, at once to *deduce* our experience, and to redeem the *errors* of things ; that there is a *Reason*, in short (sect. 25), which conceives and moulds things to its ends, however obdurate and rude they appear ; and by the right of its own nature (sect. 67) controls, restores, and animates

All thinking things, all objects of all thought,
And rolls through all things.

122. On the other hand, we have not denied that what we have termed *Necessity* (sect. 67) has sometimes maintained its hold upon things ; or that material unsuitable for the reception of Reason may be at times encountered. Accidents still leave in things a residue of their original indeterminateness (sect. 98, 99). And *Change* seems still

to be subject to *chance* :—neither does it seem in all cases to be determined by *mind* (sect. 120); nor does it suffer the control of any other principle which it is in the power of the soul to conceive (sect. 114).

123. But what need this imply, unless it be that there exist in the soul resources which we have not yet considered?—resources which implying some new *need* of the soul, may allow her, *first*, to conceive a more complete and harmonious experience than her *Impressions* can afford, and *then*, in that completer knowledge, some solution of those difficulties which we have been describing?

INTRODUCTION TO PART II

THE *a priori* DEFINITION OF NATURAL BEING

124. It was Berkeley's contention that ideas (or what we have termed impressions) are incompetent to inform us of an inert and material world distinct from them. And it must be acknowledged that there can be found in *experience* nothing to lead the mind beyond and outside these ideas (sect. 15, 16). If therefore these ideas, or impressions, could also be proved perfectly *rational* (sect. 25), Berkeley's contention must be completely established—we must then be able to show Nature to be the senseless illusion which he supposed. On the other hand, were ideas or impressions by nature unable to accomplish that *end* which we have shown the mind had in conceiving them—if, in short, while capable of that *being* which the mind requires of them (sect. 28), they were yet found to be *imperfectly* capable of it;—then there must exist in our mind's *nature* (sect. 16) an *a priori* cause why we should conceive an Object whose being may be fulfilled. With a view to determining the question which has thus arisen, we proceed to inquire whether impressions are or are not capable of that being which the mind looks to derive from them.

125. And we may, I think, easily convince ourselves of the defect of Impressions in this essential particular. For no sooner do we consider any series of impressions *aaa...* (sect. 21), than it becomes evident that, although such a series admits of an ever *increasing* actualisation (sect. 32-36),

yet it will never admit of any *ultimate* one, in the mind. We need only observe that *any* of its members *aaa...*, when being attained, must be succeeded by *another* (sect. 35), in order to be satisfied of the soul's impotence to attain and give being to a *last* (sect. 21) or to an *end* (sect. 23) of them. Now there must thus always *remain* in the *conception* of the soul an unending series *...aaa...* beyond the utmost of her power to draw within the boundaries of *Existence*. Like man, the understanding

never is but always *to be blest*.

An insufficiency of Being so inevitable seems to attach to Impressions; which must, then, be unable to satisfy that want of Being which the soul only exists in order to actualize.

126. Impressions, having thus proved defective in a point so essential, can only, on our principles, imply the presence hitherto in the soul of an imperfect opinion of what the truth is of *existence itself*. No extraordinary motive need be sought for the soul's abandoning an Object of a kind so illusive as her Impressions. A rainbow could never be more unavailingly pursued by a child than this Object could be pursued by the soul. To turn to a nature which shall fulfil what her impressions only pointed the way to is the first need of a principle whose only pursuit is Being itself (sect. 124). The soul must now be as strongly compelled to conceive an actuality which can *not* be surpassed as it was formerly compelled to pursue one which must be so (sect. 24).

127. That the nature of this Actuality must yield to Existence not less than that *whole being* which has been conceived in any succession of impressions (sect. 125) determines that such an Actuality cannot be derived from that *process* whence impressions arise (sect. 32-36). The design and form of the Actual which is determined and alone exists by that process (sect. 31) *this* Actuality must thus completely

exclude from its essence. The new Object which must be entertained ; while *founded* upon a series of impressions ; yet must be itself of a wholly different form and aspect. The necessity of such an exclusion brings into the mind a thing whose being neither *comes* to exist (sect. 32) ; nor yet *declines* from existence (sect. 35) : it is not a thing capable in any respect of assuming those forms of existence which are peculiar to impressions. To that whose being can not be exceeded (sect. 126) there thus accrue these additional attributes : to be *once for all*, and without vicissitudes ; to be homogeneous and simple ; unanalysable and indivisible ; and one (*A*) and not many (*aaa...*).

128. A form of being thus determined must be incapable of being conceived without a further attribute, which finally distinguishes its mode of existence from that of Impressions. Impressions exist through the soul (sect. 34) : but the soul is incapable of giving existence to an *unsurpassable* thing (sect. 127). The most comprehensive mind must be the most convinced of the *other* or *self-sustained* nature of an unlimited object. The nature which is to be apprehended ; while for our knowledge *derived* from a series of impressions (sect. 127) ; yet must once again (sect. 127) acquire their opposite attribute ; and a thing which the soul does not uphold must be as much conceived as one which she does.

129. Such is the *a priori* nature of the Object which must supersede a series or train of impressions (sect. 24). To the *thought* of this Object we owe our belief in an existence which, in uniting with an infinite nature a being independent of the soul, is known as a physical or natural thing.

130. The defect of *Impressions*, in tending at first to disillusion the mind, must be likely in the end rather to increase than to diminish her natural satisfaction in the existence of an Infinite Object. Desire must be thought to

be made by *their* failure only the more ready to embrace and take pleasure in Nature. Outlines which spring out of a mist are more sharply defined by the mind (sect. 33, 67); and the pleasure which she then takes in them is as much reinforced as her knowledge of them. Lovers of Nature, for whose ears the valleys "shout for joy," and to whom even the stones carry a message, might seem to share the pleasure of a soul which, having relinquished what she pursued, has opened her mind to an Infinite Existence. The whole significance of the being of Nature is not known to the majority of men. But he whose mind is charged with it, like Cortez'—

when with eagle eyes
He stared at the Pacific ;—

or he who, in "a clear midnight," ponders the soul's true themes "of night and the stars"; will perceive, it may be believed, a truth at once of his own, and of Nature's, existence.

131. We proceed to inquire how the soul is *satisfied* of the existence of a thing which must thus move her: for its existence is still no more than conceived; although, in being so, it has been determined to possess the *capability* of existing. In raising the question how the soul assures herself of the reality of a Natural World I shall repeat what was laid down in sect. 28:—that desire naturally tends to an end which consists in the *enjoyment* of its Object. For the nature of Desire is, to move towards its satisfaction with an *impulse* which it cannot itself arrest; until, being satisfied of the actuality of its Object, it reaches its required conclusion. When reflecting upon the question of a thing's existence, we should therefore consider whether the soul can conceive herself to exist apart from it; or whether the natural momentum of her being must draw her to, and unite her inevitably with, it.

132. And that the soul desires and looks for the existence of an Infinite thing ; as something which is truly essential to her, and without which she must herself be but a half and not a whole ; we have already shown the reasons for thinking. For the conception of a natural thing was not, we supposed, an *intellectual* conception only ; but something only born and nursed in *desire* : an origin which removes from the intellect the coldness and indifference which must otherwise make it impotent (sect. 15). And thus the soul warms when she apprehends the being of an Infinite thing ; and melting as it were and running over unites herself with something in her apprehension of necessity *actual*. The soul's nature is of a kind naturally to beget Existence and Being. When therefore reflection and doubt and re-consideration are all equally unable to affect her conviction that Nature exists, she must consistently give way and wholly resign herself to her impulse ; and when such is the case there is nothing left in her nature able to disturb her possession (sect. 16).

133. Thus the necessary evidence of the existence of the World lies in the soul's own *nature* ; inasmuch as what so naturally harmonises with the soul cannot fail to attract her will inalienably to it. That the proof of the Natural World lies in the soul's own nature relieves it of any need to secure its existence by appearing, like Impressions, before the *mind*. For there being of *Impressions* an *immediate* knowledge (sect. 18), an empirical unites with an *a priori* (sect. 42) proof to confirm their existence. But Nature, being incapable of existing in the mind (sect. 128), with no ambiguity reveals the power of the soul of determining, without any immediate assistance from things, the existence of Objects in harmony with herself. That the reality of Nature can be proved by *thought alone* agrees with and explains the contention of Berkeley, that no *experience* of

“ideas” or impressions could ever acquaint us with Nature (sect. 124). For impressions, from existing only as the contents of *mind* (sect. 34), can *of themselves* go no way to prove the existence of things without the mind. “Their *esse* is *percipi*; nor is it possible that they should have any existence out of the minds of thinking things which perceive them.”—*Principles of Human Knowledge*, sect. 3.

134. But what then are *sight*, *touch*, *hearing*, and the like, which seem to offer such certain proofs of the existence of the World? We shall gain some light on this subject, if we go on to show the *consequences* which follow upon the *admission* of the World’s existence. We shall thus discern, I believe, something further of the nature at once of the *World* and of the *soul*.

135. The distinction of a natural from a psychical Object (sect. 24) must lead us to expect from the existence of the one quite different consequences from those which must follow from that of the other (sect. 31-36). The faculties of *expectation*, *perception* and *memory* had their source in the *soul*’s original principle. And they were powers implicated in an actuality with which the *soul* itself was to become one (sect. 34): their development became accordingly a generation of the *soul*’s own nature. The present Object descends from a different principle (sect. 127); and lies altogether outside the *soul* (sect. 128). Hence neither can those powers illumine *it* (*A*) which only concern *another* form of existence (*aaa...*): nor can other powers pertaining to the *soul* arise from the *other* existence of an infinite being. No faculties or powers can, in other words, be found in the *soul* capable of assuming in relation to an Infinite thing the place which is assumed by expectation, perception and memory in relation to a finite object. The expectation,

perception and memory of the soul must, in short, be suspended in the presence of an infinite being ; and no superior powers can take their place in the soul. For no other reason *an infinite* thing must seem mysterious that these *faculties* must fall short of it. The loftier conception of a natural existence rises above these faculties. And it is for this reason that our knowledge of the Infinite rests rather upon what those faculties are *not* (sect. 127, 128) than upon what they *are*. We need not on this account conceive ourselves to be duped, or our hope of knowledge to have been disappointed ; since the idea of an actuality so incomplete as an unending succession of impressions (sect. 125) must make those very faculties themselves which are derived from, and implied in, such a succession (however useful these faculties be in their own place) the sharers in its imperfection.

136. If we must in some sense clear the mind of these faculties when coming closer to the heart of existence, yet we must also assert them to be not without their own purpose in respect to the World. That they have their part to play in it is implied in the circumstance that a succession of impressions must maintain some connexion with that *consummation* of itself (*aaa...*) which has been contrived for it in an infinite being (*A*) (sect. 127). What is psychical and of the soul (sect. 18) must be connected with what is natural and other than the soul (sect. 128). A series of impressions cannot, in short, *persevere* in its *original* state ; but *implying* that in which it is consummated, and become a whole, must reflect in its *own*, that *other* nature : in other words, it must refer to, mean, or signify that nature ; or, as was laid down in sect. 9 and 15, *symbolise* it. The varying image or reflection of a thing seen in a stream of water may be at first conceived as something visible only ; but when it has been judged to have the character of a reflection, it

80 A SERIES OF IMPRESSIONS REFLECTS ONE PHYSICAL BEING

must signify a substance outside it. It is the same with a series of impressions ; whose nature, at first only conceived in respect of itself (sect. 9), must afterwards become the symbol of a second order of existence.

137. The observer of a moving stream will perceive the substances it reflects in some degree disturbed and distorted : and it is thus with the natural thing which is reflected in a succession of impressions. What is one (*A*) must be seen in such a succession (*aaa...*) as many (sect. 127) ; what is without succession, as successive ; what is homogeneous, as heterogeneous ;—what, in a word, is infinite, as finite. For, while a natural connexion must obtain between a succession of impressions and its physical consummation (sect. 136), yet their essential difference must forbid the former (*aaa...*) from in all respects following or mirroring the features of the latter (*A*) ; which can, notwithstanding the affinity of physical and psychical things, never appear to the *soul* save in the imperfect image which is all that impressions have the power to exhibit.

138. As any feature in the different reflection must, notwithstanding, involve its own relation to the object which the reflection discovers ; so the various members of a train of impressions must equally show their own traces of the object which they signify. Hence, *future*, *present*, and *memory* impressions (for these form the various parts of a train of impressions) must be each connected with the natural existence which is reflected within them. Each must be such a symbol of the *same* physical thing as the different nature of each permits. A series of impressions must be, in other words, capable in any of its parts of symbolising a single natural being.

139. To speak, therefore, of these symbols in order.—First, any *future* impressions (sect. 32, 33), being no longer

unmeaning, must acquire a meaning ; and although they remain themselves unactual (sect. 125), must yet, in reflecting what exists on purpose to make them actual (sect. 127), be all at once transformed into the symbols of what *is*. By these symbolic impressions the nature of that Being which supports, upholds and satisfies the soul, is represented in its eternal (sect. 21) or boundless (sect. 23), character. And although the mind must herself constantly *pursue* the actual by means of these impressions (sect. 125) ; by them too she recognises, in the existence of a natural thing, that complete fulfilment which is desired by her (sect. 136, 137). It has been sometimes supposed a reproach to our understanding that the actuality of the World still exceeds the mind's most extended anticipations of it. What we believe is, that the World was only conceived with a view to this end—to fulfilling, that is, what our anticipations are, by their nature, precluded from actualising (sect. 127, 135).

140. In the *next* place, any *present* impressions (sect. 34), being transformed and now reflecting something distinct from themselves, become *another's* image (sect. 137) ; looking into which the soul must perceive the various features of the world, as we perceive our own, when looking in a mirror. In thus transforming her impressions, the soul has made them what they were not—symbols, images, and, in short, *sensations* (sect. 9, 15) : for whereas impressions have no significance (sect. 15), *sensations* signify natural things, and have a meaning, like the sounds of speech, or the signs of an alphabet. Without conceiving any use of eyes, hands, or other organs (which have no conception) the progress of the soul's purposes has itself taught her how to touch, see, hear, and the like : what is intangible becoming the medium of tangibility ; what is invisible, of visibility ; what inaudible, of audibility :—inasmuch as no impression is in itself ever sensible, or an object of sense ; but is only the necessary *medium* of sensibility (sect. 15, 18).

141. *Lastly*, the impressions of *memory* (sect. 35, 36) must become symbolic, and reveal the nature of the thing which they symbolise. Their actuality is in itself defective (sect. 35); but in representing a thing which is unchangeable (sect. 127) they become the consistent images of a being which constantly *is*. It is as symbolical of a natural being that these impressions decay (sect. 36). And it is this natural thing which re-appears when, by association with actualities more complete than themselves (sect. 34), they are revived or remembered. Hands once touched; a jewel seen; a perfume smelt—of these the permanence is equally affirmed in each successive revival of them. The origin of the faculty of *recognition* may be found here; a faculty constantly used by us when handling, seeing, smelling, hearing, or otherwise acquiring the various perceptions which we may, or do, acquire, of particular physical things.

142. Not every sort of impressions indeed can be considered thus to reflect a natural thing in it. Those impressions only can do so which the soul is able to control and herself bring into existence (sect. 76). The reason of this is that such impressions as are *subject* to the mind can alone find, in a physical thing, the consummation that is required by their nature (sect. 127);—and not others: for *others* cannot form determinable *successions* of impressions at all (sect. 112). The belief in the existence of a natural object must however be raised on the belief in the existence of such a succession (sect. 127). Some confidence, therefore, in the soul that her own interference may *ensure* the existence of a train of impressions must be considered a condition of the soul's recognition of a natural object. The whole range of impressions thus includes some which reflect an external object as little as the back of a mirror; and these impressions are they which are the least easily controlled by the soul.

Such are many disordered visual, olfactory and auditory impressions. Equally subjective are those varied experiences which we term physical pains. With such there corresponds no world of *external* or *disembodied* pains ; existing, although unfelt. We can assign no reason for attributing this difference to any special incapacity of the Natural World to include such particulars. And we must rather consider the mind's renunciation of her own powers with respect to them to be the real cause.

143. The several considerations of the foregoing sections 136-142 show it to be impossible for the soul to have conceived the existence of Nature without having at the same time so transformed her *impressions* as through them to make the features of the External World clear and evident to her. Knowledge, in other words, must share and have its part in the development of the conception of Nature. Our knowledge, accordingly, of the Natural World is not an *original* faculty of the soul. It does not spring, like Pallas from the head of Zeus, complete and in its full array ; but is rather to be attributed, as we conceived it must be likely to be (sect. 9), to the soul's active desire ; which, causing that to become symbolic which originally was not so, by the power of conception makes her acquainted with, and informs her of the nature of, the sensible World.

144. It follows that the Natural World can be no more than a kind of fair copy (sect. 137) of the various *impressions* which the soul, whether she possess them in fact or potentially (sect. 56), finds herself entitled to transform into sensations. Some have supposed that we must look into Nature *first*, in order to discover the origin of our sensations (sect. 26). And this opinion seems to be supported by the nature of physical things, which, being eternal (sect. 127), seem qualified to act as the causes of our sensations. It is,

however, imperfectly clear how the eternity of the World can be a cause of our perceiving it ; or how we could determine its *existence* unless by our own *conception* (sect. 18). It may, I think, be considered certain that the soul can alone be the cause of our sensations (sect. 16) ; and, in consequence, of all that we perceive in the World, however independent of the mind that must still be considered to be (sect. 128).

145. We have now determined the nature of the *second* of the soul's Objects ; and explained what its principal purpose seems to be in the scheme of existence. Impressions, we have seen, could not satisfy the soul ; and therefore another Object, having a form more consistent with the mind's desire, was required ; that a natural harmony might thus arise between the Soul and the Real. In the place of a being fleeting, transitory, and never completely capable of Existence ; the promise has emerged of an Object which is by nature neither transitory nor wanting in actuality ; but eternal, infinite, and all-existing (sect. 127). This we conceive (sect. 25) to be the second appearance of *Reason* in the soul (sect. 38) ; the properties of which may now be assumed to form the law of *physical* or *natural* existence ; or the measure of such defect or imperfection in natural things as the World may, when it has actually appeared, be found to exhibit.

PART II

THE SOUL AND NATURE

146. HAVING considered the *definition* of natural being, we proceed to examine Nature's *actual* character : to show how difference and indeterminateness appear in it ; together with other imperfections corresponding to those which were found in Impressions : although Nature follows the mind's Impressions in this too—that those remedial principles which were implied in *their* case being resorted to, the defects of Nature prove in the end as little able as those of impressions to disappoint the satisfaction of those simple, or *a priori*, purposes, which Being must realize (sect. 67).

147. Following the method which we adopted when examining the *actual* character of Impressions (sect. 40), we shall consider first the use at this stage of the *Imagination*. In the activity of this faculty may be found a kind of prelude to the procedure of the soul as she progressively attains those ends which she now meditates. The form of being arising from this source may be created at pleasure (sect. 40). There is then (sect. 142) nothing to hinder the *a priori* succession of impressions *aaa...* (sect. 21) from being transformed into the symbol (sect. 139-141) of a thing like it (*A*) ; which then consummates and completes its finite existence (*aaa...*). The power of the soul may equally be shown in many *a posteriori* series *bbb...ccc...ddd...* ; etc. ; which may be formed, and, if the soul please, multiplied (sect. 55), at pleasure. These qualities being in turn made

the media of sense (sect. 140) bring gradually to view a world of beings as independent of their own agent as are the things of a more actual World (sect. 128). Difference and Indeterminateness mark such existences ; and must lead the mind to apply to these objects those principles which their imperfections require. The pleasures of *humour* may be found in the relations of some of these things (sect. 69) ; in others, of the *harmonious* and *beautiful* (sect. 72). The combination of these objects in such ways as the mind pleases or conceives possible (sect. 96) will in turn educe from them *substances* (sect. 91) ; and *species* (sect. 97) and *genera* (sect. 100). Of these *some* being strange and fantastic will be maintained for a time only (sect. 144) ; while *others*, from more closely following the principles of Reason, may be as permanently fixed by the mind as the objects of a more actual sense (sect. 144). The fantastic and monstrous scenes of dreams and nightmares afford illustrations of the former activities ; of the latter, the more ordered world of painters and other artists : especially as these seem to express the proper and intended aim of a Natural World : as Homer, its mysterious vastness ; Turner, its infinite splendour ; or Corot, its immovability and eternal tranquillity.

148. The more particular description of the part which the imagination plays at this point will appear with the illustration, to which I now proceed, of the soul's operations in those more, or *wholly*, actual materials which it is her end to attain in this stage of her existence. Of the many impressions which may become sensations (sect. 142) any may be used by the mind for her starting point (sect. 22). If one kind is chosen to begin with, others may be added later.

149. Since there is a choice of beginnings, we may in the first place determine how, on our principles, such a series of *form* as the impressions of a *sphere* (sect. 81) might exemplify, may determine an object of sense. The succession *aaa...* being, then, not the true object of the soul (sect. 125); an existence must be possible which, having a resemblance with that succession (sect. 136), is, however, by sect. 127, one and simple and eternal (*A*); and not the reverse of these, as the nature we symbolised by *aaa...*. Add to this that the principle of such an existence does not lie, like the existence of an impression, in the *soul* or in being perceived; but in its *self*, self-borne and solid (sect. 128);—and we shall thus have completed its physical outlines. Such a being is a material sphere or body; a natural thing; or object of sense (sect. 139-141); although it must be one which the soul is unable by *sense* ever *completely* to symbolise (sect. 137).

150. That there are implied in such a thing aspects of the infinite not comprehended in this idea of a body appears, however, from the consideration that the impression *a* implies, in addition to the series *aaa...*, the supplementary *a priori* series *aaa...* and *aaa...* (sect. 22, 81): our principles require, that it devolve on *A* to satisfy, with *that*, *these* endless and indefinite successions also (sect. 126). Now it has been shown that while the soul is ignorant of body, she must attempt to attain the smallest on the one hand, and the largest on the other (sect. 125);—although in vain—she can never do otherwise than approximate to them without remission. Nor can the soul of herself be absolved from this endless task. But when she has acquired the knowledge of body, she need no longer expend herself thus in vain; considering that body was conceived by her with no other view than to carrying the burden, as it were, which was found to

be too great for herself ; and that for this end alone it exists (sect. 135).

151. Accordingly, when the soul seeks to give existence to the *smallest*, or to that than which no smaller could be (sect. 126);—but forms only the smaller and still smaller in an indefinite *approximation* to the smallest (sect. 125); at length, upon conceiving body, she devolves upon *that* the function of *fulfilling* what she has required to be fulfilled. So that, although the *impressions* of a sphere or other form must inevitably provoke her to a useless, never-ending search, whose end must still remain provisional and arbitrary ; in what is of the nature of body the smallest, or infinitely small, may be successfully deposited.

152. The *impressions* which the soul has of a sphere are subject to a division into finite parts (sect. 23) : a *body* is so therefore into those *infinitely* small ones which have been conceived in it. And of these, again, it may be supposed to be compounded. The soul, however, for her own part, will possess no faculty of representing this infinite structure to *herself* (sect. 137) ; unless imperfectly, and in the measure possible to her own *process* (sect. 139-141).

153. Accordingly, although while moving in the circuit of her own natural powers, the soul can compound the greater of parts *smaller* and *smaller* ; yet, since she must be for ever unable to compound it of those smallest or indivisible parts which are deposited in body ; her faculty is restricted to *representing* (sect. 137) the *real* corporeal parts by means of other or *finite* parts in which smaller parts for ever appearing to her (sect. 125) discover unfailing *divisions* in the sensible structure (sect. 137) ; which cannot, then, *appear* but as *complex* or *discrete* ; since that may be so called in which divisions finite at once in their number and magnitude (albeit susceptible of still being divided) are discoverable.

154. Those parts, however, of which the *natural* whole is compounded, being *infinitely* small ; the arbitrary, imperfect and provisional divisions of the foregoing section cannot be referred to the body itself however minute they may have been made ; nor found nor set down in any part of it, upon the blind authority of a subjective process. Whence it follows that, there being nothing *discrete* to be distinguished within the body, this must, although composed of infinitely numerous parts, be simple (sect. 127), indivisible, unimultiple, and in a word *continuous* ; although the soul can only represent its state to herself as complex, divisible, multiple and discrete.

155. The greater being the correlative of the smaller (sect. 23), it follows that, in the same way that impressions of a sphere lead the soul to search for the smallest—a thing which is to be found, however, not in the soul, but only in body : so also she seeks the *largest* or infinitely large ; although to no greater purpose, until she meets it in Nature, and what is other than herself.

156. There a body attains in consequence, for the conception, an infinite magnitude ; and is accordingly unable any longer to be represented by the mind's smaller *faculties* (sect. 135) ; which, *symbolising* such a body, indeed, by adding height to height, breadth to breadth, and length to length (sect. 139-141) ; yet thereby approach no nearer to its unapproachable existence (sect. 135). In such a body the soul attains her real purposes (sect. 139) ; and, being most herself when she seems least so, rejoices in an object which only exists in order to outreach her original, defective faculties (sect. 135). Such is the nature and origin of this body : which is therefore without form or place ; and which, compounded in the manner described in sect. 154, is one, and not many ; indivisible, and not divisible ; and

continuous, and not discrete ; although to the soul that represents this body it must be all these—having form and place ; and being many, discrete, and divisible.

157. It should be remarked, however, that a body, by the terms of sect. 142, might be actual without at the same time being infinitely large or formed of infinitely small parts. The soul's capacity to originate the succession of impressions *aaa...* must generally guarantee the being of a limited body corresponding to that succession (sect. 81, 142). But it is necessary for the soul to possess the *further* powers of forming the two *different* series *aaa...* and *aaa...*, before the existence of the physical magnitudes which answer to *these* successions can be recognised. The infinitely large and small might not, in short, seem actual unless the soul can generate the larger from the large, and the smaller from the small, without limit.

158. Such a condition might seem to make the existence of the infinitely large and small incapable of any actual demonstration. For we can bring neither the very large nor very small within the range, I will not say of our perception, but even of our imagination ; and a man must try in vain to figure the dimensions of a molecule or the distance of a star. Nevertheless it seems possible for the soul, and not at least in *contradiction* with her essential nature ; not only to give being to innumerable like impressions *aaa...* ; but to originate successions of impressions of the smaller and smaller and the larger and larger ;—the smallest and the largest only, she must be for ever incapable by her nature of originating. Accordingly, it only requires to conceive it certain that the smaller and greater *might* have been completely determined (were the mind's own proper powers extended to perceive them), in order to acknowledge the *existence* of these successions (sect. 142) ; and thereby to

provide the evidence required in turn for the existence of the infinitely small and large.

159. It may accordingly be thought that further inquiry may or may not result in ascertaining the actual existence of these natures. The effects of either may thus be considered. We may first inquire what the consequences are when the form *A*, though it possesses the attributes assigned to it which make it an actual body (sect. 149), is *deprived* of those which make it an infinite thing in either of the additional significations of that term. In respect first to the infinitely small. If a *smaller* might not be supposed ascertainable at some point in a series *aaa...*; as the *absence* of the infinitely small must then be attested; so the body *A* must be considered to be discrete or finite; not continuous; nor formed of infinitely small parts: to such parts the Imagination only could then secure a less than complete existence (sect. 147). An example of such a conclusion occurs in the doctrine of Democritus; the impenetrable, solid atoms, which he supposed to exist in the beginning of things, being conceived by him to be incapable of division. Other reasons might perhaps be propounded in favour of the being of indivisible bodies; although it might be difficult to raise such reasons beyond the reach of dispute.

160. The infinitely *large* must, in its turn, be thought wanting, if the existence of a succession of impressions *aaa...* must be judged to be so (sect. 142). There must in that case be left once again to the Imagination the task of securing some sort of existence to that series; and in consequence of furnishing the condition for there to be accorded to the finite body *A* an infinite, although imaginary, expansion. An instance would arise, were we to suppose the Natural World to have consisted of nothing more than the sphere we began by considering (sect. 149).

161. It is to our belief in the fulfilment of these conditions that we owe our knowledge of *Euclidean space*; which, while incapable of arising from the *mere* imagination of an unbounded body (sect. 147), notwithstanding comes into existence when the infinite expansion has been meditated of a truly actual, although finite, one. The vacant amplitude which we have deduced exists outside the *soul* (sect. 128). It is everlasting, indestructible, and timeless (sect. 127). Its height and breadth and length, although unceasingly anticipated by us (sect. 139), are such that *our* use of these terms can give us only a symbolic idea of its own formless existence (sect. 135, 156). And although of an imperfect actuality, and not in consequence perceived by the physical senses, or ever to be apprehended by them, this nature yet fails not to possess the being of natural things that are imagined (sect. 147). In all which it agrees with what we mean by space.

162. It is on this *a priori* object that *pure mathematics* raises its original structure: which is itself accordingly not *a posteriori* (sect. 25). Such an object affords a natural field for the play of pure thought:—whether it be that this object is considered abstractly and in one dimension only,—when an infinitely long line (sect. 135), having been symbolically divided (sect. 136, 151) and subjected to analysis, gives birth to *number* and its properties, and the sciences thereon dependent; or whether it be considered in two or three, or by analogy in more than three, dimensions,—whence there appear the sciences of figure, of so many various kinds. The play of mathematics is extended when the Conception, devising from the original, other forms of, space, like those of Riemann and Lobatchevsky, generates for these forms in turn, through the *a priori* Imagination (sect. 158, 160), their several systems; which having been thus created

apart from *experience*, in an immediate conformity with their *conception*, have their own *a priori* laws and deductive principles. The logical validity of metageometrical systems it would be beyond my present design to discuss. I shall only observe, with reference to certain conceptions that appear in them, that space is not an object of sense (sect. 161); that any *consistently* formed space is of necessity homoloidal (sect. 160); that any curve which might be inferred to confine our free movements in a three-dimensional space must imply the *real* existence of a homoloidal space constituted of *four* dimensions (sect. 150): and that it must hence be impossible, without fanciful assumptions, to deduce upon grounds of *experience* the finitude of our space; or to conceive *any* space to be subject to crumplings, distortions or alterations of shape.

163. Although the hypothesis that body may be neither infinitely large nor formed of infinitely small parts might justly be examined (sect. 159), because some important conceptions arise from this notion, yet Nature's infinite minuteness or extension need not be certainly supposed to require any contributory help from the Imagination. The advance of physical science would seem to show, if not the indefinite divisibility of bodies, the impracticability at least of demonstrating what their term of structure must be supposed to be. The same is true of greater, as of smaller, bodies. Intellectual activities such as those which have been spoken of in the case of a single body (sect. 149) lead to other bodies' being ascribed to the World. Inference adds to their number. And if Nature's *sensible* bodies seem in the end to be only scantily distributed through space; there remains reason to believe in an insensible ether which in filling all space *may* be thought to give ground for concluding as much to the infinite extension as to the infinite minuteness of Nature.

164. Such, I believe, must be the reasonable explanation of those *impressions of form* (sect. 81) whose more rational counterpart, appearing in a *body* in every way infinite, secures to the soul that satisfaction which impressions have been proved unable to do (sect. 125). Such an object ; while it cannot, as being in some degree of empirical origin (sect. 81), be considered as a necessary mould or frame of rational thought ; yet notwithstanding has a form which seems to show, as perhaps no other physical being can do, the spontaneity and freedom of the mind ;—the nature of *Reason* ; and what the force is of that *Desire* which makes the mystery of this body itself serve the soul's ends (sect. 156) and interpret her growing meaning (sect. 130).

165. Many other impressions might have been used as a means whereby similar advantages could have been made accessible. Many exist which the mind may *control* ; and these, therefore (sect. 142), may become the further instruments of the soul's recognition of Nature. These *sensations* must, however, determine in their natural counterparts those defects which exist in themselves (sect. 66). The physical world must, equally with that of impressions, be perceived to multiply and to become confused. It will be evident how the necessary affinity of Nature with Impressions (sect. 136) involves for the intelligence Nature's variation and difference (sect. 53) ; its relations (sect. 57-61) ; and unity (sect. 56). The soul must discover an Actuality, not simple and at once adapted to Reason, but in some measure estranged from her, like Impressions, by its *Difference* and *Indeterminateness* (sect. 66). Nature must, however, like Impressions, be capable in its turn (as I shall now attempt to show) of discovering in the end the same virtues as

that unbodied figure of the thought
That gave 't surmiséd shape.

166. In the first place *Humour* and *Beauty*, which brought some order into the world of Impressions (sect. 69-73) make an equal and more familiar appearance in *Nature*. For either becomes apparent in *Nature* as the impressions which embody its principle reflect, when transformed into sensations (sect. 140), their natural counterparts. We poke our fun at *Nature's* august self (sect. 69). And *Beauty* may be as much found in *Nature* as in the mind (sect. 73).

Waters on a starry night

Are beautiful and fair ;

for those impressions by which we perceive such objects are themselves so (sect. 72) The forms and colours of *Nature* are not more evident than the beauty of that which is only a fair copy of impressions (sect. 144). *Beauty* being present in *Nature* orders and harmonises its confusions. Little interests and delights the *Mind* more than this beauty. It gives to such things as possess it a fame more lasting than kings ; as to roses, or the features of *Helen*. *Beauty* is the associate of every true principle, and its pleasure of all true affections. Every rational thing seems to be informed by its principle and every true being, and at last the Highest of all, to be invested by it with a supreme and final perfection.

167. But *beauty*, like *humour*, makes a no more certain appearance in *Nature* than it did in the world of Impressions (sect. 74) ; and seems rather to visit than to remain constantly in natural things. Although this rarity gives to beautiful objects an uncommon distinction ; yet principles *permanently* and *universally* fixed in the *World* must also be contrived ; that, in agreement with *Being's* own principle and the *soul's* (sect. 67), *Nature's* ultimate simplicity may be everywhere recognised, and its indeterminateness defined (sect. 165). Those principles which were conceived in the first part of the *Essay* as having for their purpose to *modify*,

and to *limit*, difference must thus be as appropriately employed in restoring the true uses of the *Natural World* to the soul, as they were in the case of *Impressions*. That they need not fail moreover to do so follows from the same reason which enabled the principles of humour and of the beautiful (sect. 166) to re-enact their part in experience ; namely, that the notions proper to Impressions must be equally proper to their natural Copy (sect. 144). Accordingly, as the principles of *Substance*, and of *Species* and *Genera*, were effectual in removing, or at least in relieving, the defects discovered in Impressions ; so must these principles be expected to be not less effectual, when applied to the materials of a Natural World. Of the consequences which follow their application to Nature it will be necessary to speak only briefly ; since all that needs to be determined can evidently be inferred if we consider with respect to *infinite* existences the general purport of what was said in sect. 87-108 with respect to finite *trains of impressions*.

168. With respect then to what was laid down in regard to *Difference* in sect. 89-91, it must be observed that the substantive impressions described there discover (when transformed into sensations) in the world of Nature *bodies* with the attributes of light and heavy, hot and cold,—of sound, taste and odour. A union of these qualities could not appear in the soul without a correlative response in the World ; wherein, then, the qualities are perceived to be fused in a single nature : the tangible becoming audible ; the fragrant, light or heavy ; the sapid, hot or cold ; and so on, as all individual things agree in showing. A single bodily nature (sect. 163) pervades such differences ; and, removing their aloofness, discloses in all its one corporate form. The mediate dependence upon form of certain sensations originates the remote *signals* or *signs* (sect. 84) of physical

things ; a circumstance which permits us to conceive the sounds of distant streams, or the cold of remote glaciers, or the odours of inaccessible flowers, to be significant of *substances* ; to which all these qualities are referred, and of whose forms they constitute the fainter or secondary adjectives.

169. The attribution to such substances of shades and colours, in completing the work of this principle, adds to our power of hearing, smelling, and otherwise perceiving the objects of Nature, our power of *seeing* them. The circumstance that colour has two dimensions (sect. 22)—which, in virtue of the reasons applying to body, may equally be supposed to be compounded of parts infinitely small, and to be in consequence continuous ; and for the same reasons, infinitely *large* ; although no longer in three, but only in two, dimensions ;—differentiates this quality from such as have no dimensions. It is because this quality possesses dimensions that colours afford more significant signs of body than either sounds or temperatures, or any other kind of attribute. The peculiar use of colours is explained by Berkeley in *A New Theory of Vision*, sect. 141-143 ; in which he says that the visible square “is fitter than the visible circle to represent the tangible square” ; because “the visible square contains in it several distinct parts, whereby to mark the several distinct corresponding parts of a tangible square, whereas the visible circle doth not.” It follows that colours become so expressive of body that the mind never ceases to judge of body by, and to discover body in, them ; nor are we perhaps so capable of abstracting them from it as we are other qualities. A man who walks by a river, down a lane, or in a street :—wherever he may look, he will acknowledge his inability to see the colours of the water, houses or trees save as signs of bodily shapes and forms : with which, diverse as body and colour are (sect. 63), he naturally *identifies* those various signs.

170. Although the fact that colour possesses dimensions fits it to reveal the size and shape of bodies ; yet colour is not much better contrived than the other qualities to discover the *depth* of bodies ; seeing that, while colour is certainly assigned (as well as scent, sound, temperature and so on) to the whole volume of bodies and to whatever *depth* these may occupy ; yet, because the two dimensions of colour form an unbroken surface or screen (sect. 85), there is no means of seeing the least way *through* any colour. Those colours which are inferred to be present *behind* the visible colours must be themselves invisible ; and cannot, then, afford to the mind a sign of body. In speaking of one thing's *intercepting* another, we recognise the inability of colour to discover the depth of bodies. To have been exempt from such interception colour must have had, not two, but three dimensions. Only when a body, like air, remains *without* colour, and continues invisible, can it be determined from colour in what plane a body is placed. Such signs as are then visible will reveal the depth or profundity of a coloured body.

171. The continuity of colour being fitted or applied in this way to the continuity of body, point to point, a consequence ensues which explains a familiar character of all substances ; namely, that to the same part of the same body there cannot be at the same time assigned two several colours ; as both green and red, or black and white. For, were they to be both together assigned to a body, they must be at once the same and different upon the screen of colours (sect. 170) ; and the white, consequently, *black*, there where it was white ; and the black *white*, there where it was black : which is impossible (sect. 53) ; although in the case of what is without *dimension* there is nothing absolutely to prevent the intermingling of differences qualitatively alike ; and different scents, sounds and temperatures may be actually

attributed without contradiction to the same parts of the same body : as hot and cold to the same volume of water ; the fundamental tone and its overtones to the same string ; or bitter and sweet to the same juices.

172. The association with body of colours, sounds, tastes and the like has for the Natural World the same result that it was found to have for Impressions ; viz., of discovering in Nature an essential property of its existence (sect. 67, 90). These qualities are in themselves divided and disparate, and they must remain thus in an inactive mind. But when Reason has combined them with body, they can never resume that irrational isolation which at first distinguishes them ; nor, by means of their difference, fail to express and to re-express the true likeness of Nature. That sounds and colours, odours and flavours should accordingly become adjectives or attributes of *bodies* ;—that these should shine, sound, smell, weigh, taste and so on ; is a proof that Reason has her part as much in the Natural World as in the world of Impressions. Her part is universal (sect. 67). And therefore it must be true of any rational quality that it should be incapable of existing substantially, or otherwise than in connexion with and as it were supported by body.

173. That infinite frame of the World which was conceived in sect. 163 has now become the theatre of many distinguishable natures which form with it physical *Things* or *Substances*. Colours, sounds, and the like have now their place in the Whole ; and therein, their difference composed, they exist as its several expressions. The stars and planets which constitute it, like the letters of an illuminated manuscript, seem to express the increasing meaning at once of Nature and of the soul. Answering these forms of reason with such proper names as *Pleiades*, *Orion*, *Arcturus*, the soul now reveals her essential part and interest

in the Natural World (sect. 130). These operations portend that culminating one, whereby more general or *universal* ideas are formed in the mind ; and an *a priori* knowledge of all possible existence determines the World's *indeterminate-ness*. In conformity with the notion that the influence of principles in the world of *Impressions* must be participated in by the things which Impressions reflect (sect. 162) ; we must suppose that the laws determined in sect. 92-97 will have their counterparts in the Natural World. How all *specific* natures, accordingly, to which names such as *planet* or *star* are given, have come to be conceived and actualised by the same means and with the same purposes as their serial images before them, will be evident, I think, to those who consider those sections ; from which it will also appear how *accidents* (sect. 99) and some other eccentricities (sect. 98) appear in Nature ;—eccentricities, however, as little able as their originals to confuse the specific *principle* which must now be adopted as well for the Natural World as for that of Impressions.

174. The *species* introduce the *genera* of the physical World (sect. 100). Such genera serve the same purpose that was ascribed to them in sect. 103, of determining the character of things not hitherto realized in the mind. Genera afford new definitions of substantive things (sect. 105) ; and their relations (sect. 106) admit of our finally contriving a system of inference (sect. 108) which, with the co-operation of species embraces the whole range of existence. The classification in which such a system results determines an order of disjunctive judgments ; the use of which enables the mind to some extent to penetrate into Nature's recesses ; to define and limit at once its known, and still unknown, systems ; and to divine something of all things.



175. The *a priori* characters of these Definitions (sect. 96, 105) furnish the matter of Deductive Logic ; whose conclusions spring from, and essentially depend on, them. The judgments commonly studied by deductive logicians ; as, particular, enumerative, universal, hypothetical and disjunctive ; are alike concerned in the construction and the use of that system of definitions which has for its end to determine the limits of Nature (sect. 92). The relations of such judgments form a natural path to immediate inference, and to the Aristotelian or deductive doctrine of the syllogism. There is perhaps nothing of real use in this science which may not be shown to contemplate an existence (like that conceived by Plato) formed and upheld by definitions. If some disrepute has lately fallen upon this subject it must, I think, be imputed to the sin by which the angels fell—the too “ambitious aim” which has led it to exceed its true part of re-determining the measures of an overgrown and excessive experience (sect. 92) in an attempt to absorb in its own the functions of all other categories.

176. Those several difficulties which the *a posteriori* features of Nature offered to the soul (sect. 165) are thus, it appears, not overcome only, but made the means of Nature’s evident improvement. The true features which Nature must possess (sect. 67) seem to have been reassumed by it. A Body, infinite, although to the senses fragmentary ; of which the several parts are *Substances* ; so organised and contrived that nothing *undefined* can be thought to exist ;—such are the satisfactory constituents of this Being ; which, also at times uniting with these excellences the fair proportions that give beauty to the violet or *primrose* (sect. 166), fails not to become an Object worthy of the desire which the soul has for it. A part of those intentions has thus been fulfilled which led the soul to expect from the

Natural World a more thorough accomplishment of her designs than she could look to attain in the world of *Impressions*. What still remains for the explanation of this Object must now be considered. We have still to determine how *differences* provoke such *changes* in Nature as they provoked in the world of Impressions (sect. 110, 111). By what category change may be reconciled with Reason must then be considered ; and, lastly, how, by submitting to Reason, Nature at length attains that end and final perfection of which its essence is capable (sect. 118).

177. How Change appears in Nature, and why we must admit its presence therein, may be explained by that general relation of Nature to the soul which made Novalis call the natural world "an illuminated table of the contents of the spirit" (sect. 167). It must follow from this relation that the present structure of Nature (sect. 176) must seem as liable to relapse into its former disorder (sect. 165) as Impressions themselves did (sect. 112). If, considering a train of impressions c_1, c_2, c_3, \dots or c_1, c_2, c_3, \dots , we proceed to form from it an instrument of hearing, sight or smell (sect. 140) ; we may then observe what such *sensations* must apprise us of in their *natural* counterparts ; namely, sounds, sights or odours, either totally vanishing (C_1, C_2, \dots) or changing their nature C_1 into the different natures C_2, C_3, \dots (sect. 111).

178. If the title of these things, and of others like them, to a place in the Natural World may sometimes seem doubtful ; and we may be apt to wonder whether they can truly exist "without the mind" and altogether unperceived ; the explanation may chiefly be found in the incompatibility of such perceptions with those which we ought to have of natural existences. A being like C_1 , in being perceived to change, loses at once the most important and best of its attributes. A moment seems to cut off its pretensions to



physical existence (sect. 127). The perpetuity which, being hitherto supposed in it, gave it a place in the Natural World ; which freed it from variousness and vicissitude of being, and made it simple, homogeneous and self-dependent (sect. 127, 128) ; in being now cut off from it, seems to remove it from Nature ; razes it from its place in Existence ; and, leaving it incapable of illustrating any kind or mode of the Actual, admits of its being *spoken* of only in so far as the *sense* which the soul had of it (sect. 140) continues to maintain in the memory (sect. 141) a present record of an existence which such a being has itself for ever irremediably yielded up.

179. The colours and the temperatures, the sounds and odours of Nature being no longer immutable are thus revealed as disappearing and as appearing ; and the Natural World, altering its proper character, henceforward seems the infinite theatre of change and generation. Nature is *ratio mersa et confusa*. It might be said to resemble the Cretan Minotaur ; for it partakes of two natures which can never be reconciled with each other :—of the physical, that is, and of the psychical. For the members of Nature are of a *physical* kind so long as they *endure* : invariable, simple, homogeneous (sect. 127), and not dependent on the soul (sect. 128). But when, disappearing, they are retraced only in the mind's psychical records (sect. 178), Nature of necessity assumes the forms of the soul's *process* ; is inscribed there as variable, complex and heterogeneous (sect. 127) ; and acquires a past and a future. The man-bull of Crete seems not so monstrous as a *mutable* Nature ; which thus calls the more for principles to correct and to reform it (sect. 67, 112).

180. That the condition on which the *recognition* of a physical thing chiefly depends (sect. 142) may continue in

these circumstances to be maintained, the agency of the mind or soul must be presumed to be active in those series of impressions by which the change of Nature is made known (sect. 177). And this activity moreover we saw reason for considering to be the probable cause of the change which appears in impressions (sect. 115). We ought, therefore, to consider what effect in the *Natural World*, corresponding to such a creative activity, must be added to those effects already determined as arising in Nature from Nature's affinity with the soul ; and how mind may be thought, by influencing her impressions, to play some part in the World's change and mutations.

181. We ought first to enquire whether such an intercourse of the mind with Nature is possible. The scepticism generally felt with respect to the activity of the mind in the *Natural World*, arises, if I am not mistaken, from the imperfect views which have been entertained on the subject of Impressions ; for thus the relation of the mind to Nature has never clearly emerged. And yet how closely connected the mind is with Nature appears, I think, nowhere more clearly than in the phenomenon of change. We need only consider that such archetypes of sound as $c_1c_1c_1c_2c_2c_3c_3$ (sect. 177) may be freely formed (as by the voice of a singer or orator) at the soul's pleasure ; in order to perceive that they must reveal, in virtue of their use as *sensations* (sect. 140, 179), a responsive change in the *Natural World* : of which the state, then, might seem to respond to the soul's purposes in somewhat the same manner as the images in mirrors do to the purposive movements of those that look into them. These and the like phenomena tend to show how certainly reflection may permit our acquiescence in the idea that Nature does not bring her changes into existence "through some spontaneous and unintelligent cause" ; but that she may be as naturally responsive to the influence of



the *mind* as a *spirit* seems at times to be to those telepathic activities which have been lately admitted to exist in the same agent.

182. Such a relation being supposed in force between Nature and Mind, we might, accordingly, explain, as due to design, such changes in the World as arise in conformity with the changing trains of impressions referred to in sect. 119. No better than doubtful traces of intelligent activity appeared, however, in the changes which distinguished trains of *impressions*; and thus we were led to expect that in a new form of existence those signs might appear more distinct which in them seemed defective (sect. 123). Now the Natural World is another and a more complete form of being than Impressions (sect. 130). We should consider accordingly whether its changes may not be apprehended as more nearly adapted to the interests of Reason than those of Impressions. The search for a material released from the need of immediately *re-expressing* the soul's Impressions is thus plainly intimated; and at this it may now be possible to arrive; considering that it may be not impracticable for the mind to discover in a form of existence independent of her perceptions (sect. 128) such an insensible being as she is in need of.

183. The constitution of any world must, by the principle of sect. 67, be consistent, and in harmony, with Reason. That it may, accordingly, lay aside its *a posteriori* defects, those categories which form the remedial members of Reason must be active and determinable in it (sect. 115). A teleological category must thus be conceived to imply those principles which, hitherto observed by Impressions, we propose in the sequel to employ in *simplifying* or in *defining* the differences of an insensible Nature (sect. 116, 117). The dependence on the *activity* of the soul of the operations of

these deterministic or *passive* principles will lead us to deduce as the *results* of the activities of the will in the Natural World (sect. 181), first, the forms of new *substances*; and then the existence—immune perhaps from defects and accidents (sect. 122, 123)—of a new kind of *species* and *genera*. From such a world, significant of Will, we shall pass to the examination of the teleological ground of these natures. That we may make our way into this world, we proceed first to add to our conception of Nature the phenomenon of *motion*.

184. It will conduce to clearness if, in proceeding with this topic, we revert to what was mentioned in sect. 82; where it appeared that some trains of impressions, although they seemed at times to be incompletely controllable, yet might be generally recovered; and could, however often they might come to an end, be expected (in a way unlike that of other changes) to be re-excited. This loss corresponding now, it may naturally be expected, to some change of external things, we have to conceive a principle which takes account, not only of our impressions, but of physical bodies.

185. The phenomenon which we are about to describe is one of which the contemplation is (in Plato's words) "granted only to intelligence"; for we have in mind such seeming annihilations of bodies as that of the piece of silver in the parable; which disappeared without the eyes, or other senses, of the woman giving her any sign of a physical occurrence. The sensations of such bodies exist only potentially (sect. 82); but the bodies, actually; since they exist without the mind and unperceived, without intermission (sect. 127, 128). In order therefore that some reason may be conceived why the sensations cease, something must be considered to have occurred in their physical counterpart which, leaving no trace in the mind's own experience,

without destroying yet alters and affects the physical body. The change in our experience must otherwise be inexplicable. Now it may be supposed that bodies, being situated as they are only fortuitously (sect. 163), and not by reason of any necessary principle (for what is filled might not be filled, and what empty, not empty); may be capable of changing their place, and by such changes of disappearing. For body, being of an infinite nature (sect. 163), can never be all at once present to *sense* (sect. 139). By the change of its parts it may, then, be interpreted why what is at one time present to sense is not so at another. Such a conception is the simplest *a priori* notion of a bodily *displacement*: whence notions of more complicated interchanges of bodies arise; as when for instance a solid body is thought to be displaced in a liquid one; and either changes its place: since one cannot penetrate another, and still exist (sect. 53).

186. Such a principle must be necessarily founded in experience; for it is the only conception which will admit at the same time of the complete *maintenance* of a body and of its complete *disappearance*. And thus we never lose any object without inferring its displacement; although, like the ring of Polycrates, it may be believed to have gone permanently beyond the reach of our senses.

187. The notion of displacement is attested and developed by those *signs* or *signals* of impressions which were referred to in sect. 84, 85. Such signs—of odours, colours, sounds and similar attributes (as b_2, b_3, b_4, b_5)—appear at times to be unfolded without reason in the soul. But they do not therefore imply the change of a *thing*; for they consistently point, as they arise, to the single attribute (b_1) of which they are *signs*. What they involve may be considered in the first place; and then what bearing they have on our knowledge of physical bodies. Such signs as b_2, b_3, b_4, b_5 must become,

by sect. 168, the symbols or sensations of phenomena occurring in Nature ($B_1B_3B_4B_5$) ; but they must appear at the same time the signs of some constant existence (B_1). If we reflect on the *colours* of a *ball* receding from view in the line of vision, the conclusions which we must draw are plainly these :—

188. First, nothing more will be *visible* than a coloured, two-dimensional circle (B_1) ; the colour and form of which diminish progressively ($B_2B_3B_4B_5$). Immediately around its circumference other colour or colours, divided by no void or gap from it or each other (sect. 85), will be seen *expanding* progressively, for such colour or colours will be appearing in the place from which the circle's narrowing circumference must, step by step, be receding.

189. The *sensations* of the decreasing circumference will diminish by steps of a definite smallness ; which, however, may be held to be *indefinitely* small or (what is the same thing) as small as we please ; by sect. 153. That circumference therefore *of* which there are or might exist (sect. 158) such sensations, being physical, must be considered as decreasing by steps *infinitely* small. Its diminutions are in consequence *continuous* (sect. 154) ; and the mind must be incapable of determining their actual sum. By parity of reasoning, the expansions of the ball upon its return will appear to increase continuously.

190. Next, as respects the *body* of the decreasing circle —we must, in the first place, observe that although these changes might be considered indifferent to body ; yet because the *connection* therewith of the continuous, dwindling coloured circles $B_2B_3B_4B_5\dots$ must permit of the rational explanation of these in accordance with the notion of substance (sect. 168) ; there must be an evident advantage in assigning to the material form of the ball some character corresponding to that displayed by the continuously changing colours.

191. But because, in the second place, the body continues to be ; since it can be recovered (sect. 184) ; the change to be thus conceived in the body (sect. 190) must be considered indifferent to its continued existence. It follows, by sect. 186, that the change must have the nature of a displacement. But the changes which the body reflects within it being continuous (sect. 189), the displacements themselves must be argued to be so. The body, in short, must be conceived to move.

192. The difficulties which perplex the mind when considering motion seem to be principally attributable to the absence of the distinction that, whereas physical existence must be naturally infinite (sect. 127), the *soul* can only represent that existence by means of her *process* (sect. 135). That this distinction gives its chief peculiarity to motion, I shall try to show by proofs which do not lean on sight (able as this is to present only ambiguous *signs* of real motions), or on anything but reflection. And that what I intend to say may be as clear as possible, I shall consider, first, how motion must, on our principles, appear to ourselves ; and afterwards, what it must be thought to be in *itself*.

193. First, then, any motion must appear to ourselves as *not*, and not consistent with, a physical motion ; for a motion is continuous ; but what is continuous it is impossible to repeat in the mind (sect. 152), which has no more than imperfect *symbols* of the continuous when it has, or assumes to itself, the power to excite its impressions endlessly (sect. 157).

194. A motion must appear, not, then, as moving, but as forming a series of *finite displacements* ; which, although they continue unfailingly finite and in consequence measurable, yet, consistently with this necessary condition, incessantly

invite a further division (sect. 150). A moving body must seem to be here and then there ; but there is no interval *within* which the mind is not led on to repeat that distinction ; considering that the steps of motion, however persistently they may have been limited, must remain subdivisible by the mind without end (sect. 151).

195. That this appearance in the *soul* is not capable of representing motion in its own nature (to the consideration of which I now pass) may perhaps be most plainly proved by our supposing its *ability* to do so : it will follow, in this case, that a moving body, being here and then there, cannot without a smaller step have traversed this distance ; because following our *representations*, it must first have traversed a part of this distance ; and before, a part of that ; and so on for ever. From such conclusions it follows that the body must equally with our representations be precluded from realizing that least or *infinitely* minute displacement which is, however, the first displacement of all, supposing the body able to move. The consequence must be that a body cannot be considered to move at all. For it may indeed be granted to be by nature *capable* of motion ; yet, inasmuch as it is, in reproducing the soul's process, disqualified from taking the first step, it must be disqualified from taking any whatever. And it must remain, against its nature, in eternal immobility. Achilles could not upon this assumption be expected to catch the deliberate tortoise : the swift and slow being equally brought to nothing, if the physical motion of a body must enact that process by which the soul is by her nature constrained to *represent* it.

196. There would be no escape from this paradox if the hypothesis of which it is the natural consequence were the only one and were also possible. Possible, however, it is not at all—supposing as it does that what is actual can also be at the same time *unactual* (sect. 127) : for motion, it

pretends, is *actual*, but must go by steps that cannot be *actualised*. If bodies accordingly are to be displaced, and not to be immovable, some other conception must be possible, admitting of steps that may be *actualised*.

197. Since two several forms of the *actual* exist : the finite, that is, and the infinite ; it follows that the possible hypotheses concerning displacement may likewise be two. Both should be considered, in order that the true character of motion may appear as clearly as possible. If we assume the *first*, the displacement of a body will be *finite*. Accordingly, a body may without *moving* be *here* now and now *there*. And we must understand the character of its change not otherwise than the change of sounds, colours, odours, and the like : in all which the soul's *own* nature is merely repeated in the Natural World (sect. 179). The notion of the *finite* displacement of a body must no doubt appear a very remarkable one, and, to some, perhaps, altogether inadmissible : although the commonest displacements cannot be considered as certainly in contradiction with such an idea ; since any so-called motion might actually consist of many finite displacements ; the eye, by reason of their smallness, giving no sign of them (sect. 189). Such finite displacements might even seem to have been illustrated by bodies which have appeared sometimes to be transported, without moving, from one corner of a room to another ; or appeared, as if from nowhere, in spite of walls and other obstructions ; all which, however, they might no doubt freely do, supposing there were no necessity for them to pass *through* anything.

198. A more convenient explanation of such "apports" (if there be such) may be probably derived from the idea of a fourth dimension. And we must be justified, in any case of a bodily displacement, in favouring the *second* of the alternative hypotheses about motion. The mind, in virtue of her nature, must always prefer that no displacement

should occur without an *infinity* of steps intervening : which notion, though much less simple than the former, is more accordant with the nature of physical being and with the soul's purposes in it (sect. 127). The displacements of a body being accordingly chosen *infinitely* small, the soul must be unable by any *self*-examination to analyse or to determine what occurs in the *body* ;—though with this end in view, she exert herself to the utmost (sect. 135, 194). For the change, however minute, being now held to be composed of *infinitely* small steps, its continuity immediately ensues (sect. 153). And this can be represented by the *soul* only as complex, multiple, and discrete (sect. 153) ; and not, as what *itself* is, simple, undivided, and continuous (sect. 154).

199. Having considered the general characteristics of motion, I proceed to mention its various *kinds*. Bodies being many, motions may likewise be so. Two several bodies being, then, together conceived in the mind as moving to some common point, thought may represent the first of the two as passing the whole, the second, at the same time, the whole, or half the whole, distance to that point. And any distance which the first may in its passage be represented to pass,—of this the second may be represented to pass a part the equal or the half only. For there cannot be conceived *however* minute a part of either motion but the first may be thought to have passed the same, or again, twice the distance of the second. A corresponding difference must accordingly be assignable to every part of the bodies' *continuous* motions ; although in the soul's partial *representations* there can be no perfect image of those motions (sect. 198). The *a priori* idea of a swift and slow, as of an equal, motion, which has thus been contrived, is relative (like that of the great and small) because two bodies enter into it.

200. Any fraction of a distance of space may equally be

assumed with that of a half ; and may, then, be thought to qualify any part of a *continuous* progression. The differences of motions in respect of their velocity may thus be interminable ; or, what is the same thing, velocities conceived to be as swift or slow as we please. The part of *any* motion may therefore have been assumed ; and yet *another* motion may still be conceived as traversing $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{n}$, or double, treble, four, five, six or n times the whole distance which the first has traversed ; to each of these possible motions a place in an *order* of velocities being therefore assignable, in which each is absolutely and not relatively swifter or slower than another (sect. 59) ; as the numbers show.

201. To conceive in succession in *one* body the motions which have thus been conceived in a number of bodies introduces ideas of other species of motion. For of those motions which have been mentioned (sect. 200) all may be supposed to be successively embodied within *one* motion ;— the body which moves with the last or slowest velocity of the order of motions conceived (v_1) may be supposed, by adding something to its velocity, to move with a motion equal to that of the body which neighboured it (v_2) ; and with that *then* of the neighbour (v_3) of v_2 ; and so on, successively ; until it has embodied the highest velocity of the final member of the order supposed ; or, if that have none, to accelerate for ever.

202. Accelerations advancing thus by a discrete step lead on to such as proceed by *continuous* steps : as discontinuous displacements (sect. 197) do to a true motion (sect. 198). The idea of *continuous* accelerations may be generated like that of their finite counterparts (sect. 201) by the inclusion within a *single* one of the movements of *many* bodies. For in any finite order of advancing velocities (sect. 200) *indefinitely* many diversities of velocity are apprehensible as

intervening between any two ; whence there may, in the *first* place, be entertained in the Natural World infinitely small differences of motion in an infinite assemblage of natural bodies. An order of such various movements as the mind cannot in any part reach the full total of (although capable of for ever approximating to them) will thus have arisen, and be completely continuous. As many intermediate accelerations being, in the *next* place, introduced within any *single* body (sect. 201)— which will itself, then, have them infinitely small ; there will be engendered the complete idea of an acceleration. The acceleration which is thus given to a body goes by steps which could not be thought to be smaller, and is therefore continuous (sect. 154).

203. That accelerations themselves may be equal, swift or slow ; or that the swift and slow, again, may be collected within a single body and appear either as discrete or as continuous ; does not, I think, call here for more particular mention. And to enter further upon these details would not much advance the progress of the argument, to which it remains still to add to the conception of motion its chief attribute. How this arises may first be considered and then its consequences.

204. The circumstance that a body in motion maintains its existence (sect. 184, 190, 191), and that, when moving, it still retains its essential attributes of eternity and indestructibility (sect. 127) ; enables motion, when engrafted by the mind on these attributes, itself to attain and possess them. Thereby motion becomes capable of being conceived, not only as momentary, but as eternal, infinite, and indestructible ; without beginning and without end (sect. 127). For nothing can befall what is eternal ; nor anything, therefore, affect what partakes of the eternal, and has its essence. Such is the most distinguished attribute of motion :

which, thus conceived, can be as little represented by us as its minutest parts (sect. 190) : since the reasons which forbid our symbolising any infinite being must forbid our symbolising what possesses its character (sect. 135).

205. The Idea of such a motion is that " moving image of eternity " which we conceive as *Time* : a nature which (to use the words of Plato) has been framed "after the pattern of the eternal nature ; but moving according to number while eternity itself rests in unity." *Timæus*, 37, trans. Jowett.

206. That Time is thus conceived explains at once the scope and the limits of the knowledge we have of it. To determine its nature we need, I think, only look once more into our principles ; which show on the one hand that time may be in a measure *represented* by the soul. For time is a process ; and of *process* the soul at once conceived through her original principle (sect. 32). It is impossible a process should ever have been conceived in a *natural* thing, stable as this is by its definition (sect. 127), unless the soul had of herself conceived *her own* process. The soul must thus be considered the source and fount of the intelligibility of change in every nature (sect. 179). It follows that change, having been conceived in a body, must reflect in some measure the nature of the soul.

207. Time cannot, however, in every respect reflect the soul's nature. For time includes *motion* ; and of motion no complete image can be formed in the soul. The soul accordingly can represent time no more effectively than it might represent the motion of body (sect. 198). The likeness of the infinitely small divisions composing the temporal nature cannot be excited in the soul. And no lapse of time therefore can be found which cannot be reduced still further by the soul at pleasure (sect. 194).

208. The *length* also, as much as the divisibility, of time, must baffle every image which the soul can contrive of it. For, having the infinite attribute of body, it must of necessity exceed the soul's faculty (sect. 135). There can therefore exist in the soul no measure of time; which, being dispensed from the need of possessing either of those limits of *before* and *after* (sect. 127) which qualify anything of which the soul itself can form the image, is in its nature immeasurable.

209. The *consequences* which follow from this conception must next be considered (sect. 203). And *first* it should be observed that an infinite time, in having been apprehended through body (sect. 204), at the same time determines in body time's attribute of infinite *duration*. For a body is not qualified in respect of its *essence* by an idea of *duration* (sect. 127). Nor of itself could body acquire it. But when motion, having assumed the unlimited bodily nature, has cast off the restricting limits of *before* and *after* (sect. 204); the attribute of infinite duration, which it has thus acquired through body, may be then assigned by it to body; and body, having imparted its own infinite attribute to motion (sect. 204), may then receive motion's infinite attribute in return.

210. That the duration of the World may be considered as at the same time infinite and finite is, in consequence, a circumstance to be accounted for by the same principles that explain the general character of body and motion. For since body is in *itself* everlasting (sect. 127), the World must be asserted to be *without* any beginning; for the reason assigned in sect. 208;—which reason must, notwithstanding, involve *our* apprehension of Nature's duration in an opposite conclusion; since, although the immeasurable age of the World must ever exceed any image thereof formed by

the *soul*, yet a beginning must needs be *represented* in the soul :—which, although arbitrary, subjective and provisional, is not without its use and purpose for knowledge (sect. 136). Space which is infinite is yet in all ways only finite as it reaches the soul (sect. 155) ; whose faculty must accordingly represent it as beginning here or there, or where for any of her ends or purposes she may choose :—it is thus also with the *duration* of the World ; which the soul must represent as beginning or as ending then or now, at this moment or at that, as her purposes require ; since some one moment must be *chosen*, although the choice may fall afterwards upon others.

211. To grasp the World's total duration exceeds the mind's natural faculty (sect. 135) ; but of any *parts* of Nature's duration she may have an idea. This yields the *second* consequence for body to be derived from the duration of time. For time, in stamping its *unabbreviated* image on things which are eternal, stamps by the same act upon changing things so much of its duration as is consistent with their other or finite nature. Thus finite times determine duration in things transitory as infinite time does in things eternal. *Measure*, for which space affords the natural opportunity, admits of our making a numerical comparison of the distinct durations which thus arise. Temporal follows the same principle as spatial measurement. The *lengths* and the *distances* of bodies are measured by being referred to some standard body ; and the *durations* of motion, by their reference to a supposed constant and regular motion ;—the Earth's rotation ; with its approximate fractions and multiples of seconds, minutes, months, years, decades and the like ; intervals which may be added to as the need of such measures arises.

212. The union of spatial with temporal measurement

determines the last features in the varying durations of motion. For by the measurement of the *spaces* which bodies can be in any case ascertained (sect. 192) to have passed over while this or that duration is being determined in them, it may be more exactly computed than it might be apart from such calculations, what are the agreements or disagreements of such motions with themselves and each other. Such distinctions as by these means arise in moving bodies serve a further purpose by contributing to inquiries into the causes and laws of motion ; as appears for example in the promotion of the theory of gravitation by the law of Kepler, that the radius-vector of a planet moving round the sun traverses equal *areas* in equal *times*.

213. Time extends its influence beyond the limits of *body* when changes of colours, sounds, temperatures and the like (sect. 177), although in much distinct from the changes of motion, receive in their turn from time a quantum of duration (sect. 211). These changes now acquire a temporal property. And as the measurement of movement by time contributes to inquiries into the laws of motion ; so advantages of a like kind attend the measurement of the successive changes of colours and sounds, as of those of all other qualities which require explanation (sect. 183).

214. I say respecting such changes *although in much distinct from the changes of motion* ; for although a *cooling* body, for example, may seem to undergo, like a corporeal *motion*, a *continuous* alteration of temperature : and this, whether swift or slow or accelerative (sect. 199-204) ; and the like seems to be true of the changes of other qualities : yet such changes are, it is evident, very distinct from real motions. For of such changes none, it is clear, is an alteration by *displacement* ; as is proved by the circumstance that none has a space of its own to move in : so that the

elements which constitute the successions of such changes do not recede, approach, collide with or encounter each other. Such changes suppose nothing continuous. And they can have been conceived as able to assume the features of motion solely by the influence of the analogy (sect. 60) which motion has with their true modes of change: a consideration which raises the question how time measures them in their own natures, which are discrete and herein, accordingly, comparable with the finite displacements mentioned in sect. 197.

215. To consider those *displacements* in the first place:—one may succeed another as one temporal second succeeds another temporal second; but there is this difference in the comparison between these two natures: A never-ending change is distinguishable between the *seconds* (sect. 207); but no corresponding change can be found in the several *displacements*; which must, then, afford examples of *rest* and not *motion*. It is the same with the natural changes of a colour, sound, or temperature. Within *some* interval of time, the temperature, for example, C_1 , in the succession of temperatures $C_1C_2C_3$, will continue at rest, and unchanging; until, upon disappearing (sect. 178), it gives way to C_2 , which thereupon appears in its place (sect. 178). Thus only rest exists or can be found in C_1 ; or in any other thing like it.

216. The temperatures C_1 , C_2 being accordingly motionless while they *exist*; it remains to determine how they (or the displacements resembling them) must be related to one another in respect of time as the one assumes and the other relinquishes its being. It is to be noticed respecting this question, that although any succeeding terms of a motion (m_1, m_2) must imply however many intervening fractions *between* them (as $m_{1,2}$); which time itself may then measure, as it elapses, point by point and fraction by fraction: yet it must be impossible that any such *lapse* of time

should be found between the disappearance and appearance of terms (C_1, C_2) which can show no such intermediate *link* ($C_{1.5}$) (sect. 215). It must follow that time, while elapsing between those (m, m_2), cannot elapse between *these* (C_1, C_2) ; and that there can be found in the *lapse* of time nothing calculated to answer to the appearing and disappearing in a substance of its successive attributes.

217. If time, then, is still to measure their change, it remains only for a time which does not *elapse* to synchronize with their disappearance and their appearance. Now this can evidently be nothing but that *ultimately* small duration or unlapsing point of time (sect. 198) which also measures the least part of a physical motion (sect. 212). This point of time, although it can be actualised in a physical *body*, cannot be fulfilled in the *mind* (sect. 198) ; which, then, can never completely determine when any attribute disappears or appears ; although it can determine it as nearly as it pleases.

218. The relation in which changing colours, odours, sounds and the like stand to time will perhaps become plainer if we consider what the measure is of their respective *prototypes* in the *soul* (sect. 15). We shall at the same time throw some light on the temporal character of that *a priori* Object which we conceived to form the soul's original principle (sect. 24). Now it is evident that the process which gives being to a succession of impressions cannot be *continuous*. For, if it were so, the mind could only represent her successive *impressions* as she represents motions (sect. 198). But impressions are beings which are by their nature immediately adapted to the soul's original faculty (sect. 37). The impressions *aaa...* or c_1, c_2, c_3, \dots are, then, (like their natural counterparts) not in motion but at rest, or unchanging. Accordingly, time measures their changes as

it measures those of their natural counterparts :—When an interval of time (which may be conceived to be one with one, and another with another, mind) has elapsed, the appearance of one impression (c_2) and the disappearance of another (c_1) must, being measured, be conceived to be contemporaneous with some indivisible or ultimately small duration of time ; whose place in the temporal series (sect. 204) can be settled with what precision we please ; although never absolutely. It is for this reason that the members of a succession of impressions seem unbroken or contiguous to one another (*aaa...*) ; and without joints, breaks, or fissures.

219. Such may, I think, be reasonably concluded to be the character of *Motion* ; which, with Time and Measure, seems, through a relation which has already been touched upon between itself and the Principle of Cause and Effect (sect. 213), to have been designed (as I shall now try to explain) to bring the mind into the presence of those insensible substances and species which may themselves, on our principles, be thought to afford proofs of the soul's intercourse with Nature (sect. 183).

220. What we termed the original form of the Principle of Cause and Effect (sect. 94) has the peculiarity noticed in sect. 95 of including a meaning of a more indeterminate and ambiguous character than distinguishes other principles. It is on this account fitted to combine materials which might not at first have seemed qualified to illustrate it. By connecting motions with its original content (sect. 93) it gives at once to *these* a larger significance, and to *itself* a wider activity. How this category—the author hitherto of the specific laws or definitions of things (sect. 95, 137)—comes to play a part in that changing, moving and inconstant Nature, which we have been describing, must *first* be

considered : the *consequences* of its determinations therein will then become evident.

221. The addition of motion to the World admits of the observation that the changes of Nature do not occur otherwise than upon the contact of its bodies ; whether instantaneously, or after some computable interval of time. This is not rarely but constantly to be noted in things. And thus it appears surprising if one substance seems ever to change *of itself* ; or in its changes to have been associated with another while lying apart and separate from it. When this phenomenon seems to occur a feeling of perplexity vexes and puzzles the mind. Poisoners, when diffusing their materials through the atmosphere, as they are said sometimes to have done, were thought to act rather by the force of enchantment than science. And their power could be explained only on the assumption that the poisons employed by them emitted invisible particles. That substances therefore undergo their changes in connexion with some impact of bodies may be formulated as a principle of the physical world : determining that, if some body come into contact with a second, change may be expected to follow, in a time t , in all the attributes of either (sect. 117) ; but not otherwise.

222. When this has been laid down, a door is evidently opened to a further conception, leading nearer to the answer to the present inquiry, how a principle of definitions may be extended to a world of motions. For the principal consequence of the foregoing conception is, to raise the bodies of the Natural World into the rank of *instruments* or *material causes* ; with whose notion they wholly comply (sect. 83) when it is the soul itself which employs them (by imparting the right motions to them) with the design of producing or perhaps of preventing what must now in turn in all respects seem to be their *effects* or *consequences*.

223. Attention being thus fixed no longer simply upon the *substance* with whose change the mind is concerned ; but being directed to some exterior *body* which, by uniting therewith, may, in its character of cause or instrument, complete the definition and law of the substance's changes ; it needs no more, in order to answer the present question, than to apply to causes thus understood the principle of whose determinations we are about to treat (sect. 220) ; viz., that *like* causes, on the one hand, are to be universally connected with *like* effects ; and like effects, on the other, with like causes. Making, then, in compliance with this principle, distinctions in the *instruments* in accordance with their natural *kinds* (sect. 173, 174) ; we may expect a member of one species or kind (*A*), upon its union with the member of a second (*B*), to determine effects peculiar and individual to that connexion (*AB*) ; as with *AC*, *AD*, *AE*, *AF*, similarly ; and so with any other union of the sort, as the connexions *BC*, *FB*, *DG*, *CE*, may serve to symbolise : each substance being therefore as variously instrumental as those *kinds*, with which its motions may join it, are numerous. This principle, by implanting as it formerly did (sect. 173), although now on a different plan, its causes into things, is the source of that necessary constancy or *uniformity* of the Natural World by which we explain Nature's changes, and have the power of divining at once what has happened and *can* happen in Nature without waiting on sense ; so long as nothing unexampled is produced, and we are acquainted, whether specifically or generically, with all Nature's kinds (sect. 108).

224. The *evidence* needed by such a principle must necessarily conform to the terms of sects. 95, 96 ; from which all *a posteriori* sciences derive those methods of investigation that are followed when the changes of the World are explored. However far reflection may go in the

use of this principle, it is never possible to dispense with these methods. They might be termed—

Those instruments with which high spirits call
The future from its cradle, and the past
Out of its grave.

For only by their aid can it be estimated in what circumstance (*A.*) some other circumstances (*B,C.*) invariably or generally present themselves.

225. The more elaborate examination of this subject forms the science of Inductive Logic; which rests on the one hand upon the *a priori* principle described in the previous sections (221-223); and, on the other, upon the methods which must be used in referring this principle to Nature (sect. 224). The subject of this science is accordingly the *changes* of the world. And what it aims at is, to determine what principle and methods must be relied on in the investigation of Nature. It must, I think, be owned that, like its sister science, Deductive Logic (sect. 176), it has at times missed its way from having failed to attend to the character of its hypotheses or starting-points. Thus, when the fundamental principle upon which it relies is described as the Uniformity of *Nature*, there would seem to be attributed to the Natural World what can only arise from an active rational *Mind* (sect. 92, 223). A similar defect appears, if I am not mistaken, in the notion it commonly assumes of natural or material *forces*. This notion leads to what I cannot help believing to be consequences so imperfectly rational that I shall try to explain more fully what I conceive it to rest on, and how it ought, on our principles, to be amended.

226. From the fact that bodies have become instruments or causes of the changes of things (sect. 223), it seems to

result that bodies must acquire a kind of power, influence or force in relation to whatever substances they may come to be associated with. The substances in reference to which bodies possess these powers acquire, it would seem, the passions corresponding thereto. Incandescent bodies seem, for example, to contain the *power* of setting straw on fire, which is itself therefore inflammable. Poisons seem to *influence* the bodies which absorb them; and motions to have the *energy* of setting up new motions.

227. Nature in consequence seems full of powers and passions; which are ever ready to be exercised or suffered; and which, being so, display, it is supposed, the changes of the World by generating and by being engendered. Without these forces, things, it appears, must be unchanging; *with* them, change may be brought naturally into existence, and by their secret influence the birth and evolution of things, and even of minds, seems rendered easy, necessary, and intelligible. Bodies appear herein to have the nature of Spirits. They possess, it would seem, a free and independent existence of their own;—as Spirits do,—since Spirits also act upon and suffer by means of each other. That *physical* bodies, then, should also influence and be influenced by one another seems a natural, acceptable, and even inevitable notion.

228. Such is the notion of force which, adopted by common thought, has been more and more refined on by physical science. But it implies, if I am not mistaken, an essential error about the very nature of physical being—in which there can in truth be nothing *immaterial*, and deprived of all possible communication with the percipient *senses* (sect. 136). It seems evident that there can be thought nothing *necessarily* insensible in the Natural World. There can, therefore, be no insensible force supposed in it. Some may perhaps think that force, although physical, has a nature *comparable*

with that of an insensible Spirit. But how can this be supposed?—it being of the essence of Nature to be *without* consciousness (sect. 128), what sense can there be in supposing in Nature a power which depends upon and can only exist *with* consciousness (sect. 28)? I conclude that force, although perhaps useful as a mathematical *concept*, has no real existence in Nature. As little as force or influence could be supposed to exist, without the soul, in *Impressions*, can it be supposed, I think, in the things of Nature.

229. What this idea, which, having once been conceived, has assumed very various forms, seems at bottom to rest upon is the anthropomorphic belief that no law can be expected of natural things without some governing, directing, power inhering in, and prompting, their changes. But this has no support from our reason. It ignores the fact that we ought, when employing a deterministic principle, to ask of things no more than barely to *be* or *not to be* (sect. 86). It is certain that we could discover no more rational *use* for a force or energy in natural things than we should be able to do were we to insert such a thing in Impressions. “The mechanical philosopher (Berkeley observes very justly) inquires properly concerning the rules and modes of operation alone.” He has no concern with “causes”; “forasmuch as nothing mechanical is or really can be a cause.” *Siris*, sect. 249.

230. I conceive therefore that we ought to renounce the idea of an influence which, as it cannot, under whatever guise, have the least existence in physical beings, can be as little required by any of our purposes in regard to them. The changes of things are not to be explained by mystical properties secreted in Nature, but by the need in which things are to conform to Reason (sect. 92). Changes may be said to have some resemblance to letters; which exert no force upon one another and are arranged by no energy.

of their own, but become instruments or functions through the power of intelligence (sect. 67) : the system which they assume depends on the mind, and not upon any inherent impulse active in themselves. It is thus, I conceive, with the system of natural changes ; which are accordant with, and made significant by, principles of Reason. That we may speak *correctly* of energies or forces I do not indeed deny. But these forces or causes exist, on our views, in the *soul* (sect. 28)—ever actively contriving, experimenting and inventing in Nature ; although herself no *part* of Nature (sect. 128). But these are activities which point to that *teleological* principle to which our present discussion is designed only as an introduction or stepping stone (sect. 183, 219). I shall therefore defer to the later sections of this Part the discussion of these activities.

231. That the inductive principle which we have defined and explained is widely actualised needs, I think, no insisting upon. There is nothing which is not an instrument. Every body has its function. The changes which actually appear in the World fail not, in general, to accord with the requirements of this principle. Hence arise those general laws of Nature which, penetrating whatever instances there may be in time or in space, permit of our minds' enforcing some, and rebutting other, physical changes. It is by reason of this universal knowledge that the Imagination may, by combining together various natural instruments, originate the design of the most varied artificial contrivances ; which our activity may at times place among the objects of Nature, through the movement of bodies.

232. And yet the most cursory observation must lead to the conclusion that there remain in the Natural World many changes at variance with this principle. We see

(besides what may be supposed from the uncertainties referred to in sect. 221) that causes, although alike and employed in connexion with the like, may yet be unlike in operation : of which defect some poisons afford an example ; brucine, for instance, seeming to poison one body without in any way affecting another, although used in the same quantities. The yolk of an egg may be set at one time but not at another ; although the same causes or instruments are made use of. Such a defect blunts the true edge of inference, and by a new kind of accidents (sect. 99, 174) depreciates the value of physical definitions. A converse fault arises when causes, although different, involve like effects ; as fruit and water may do ; for they may equally determine cholera in the human body. The former inconsequence throws a doubt on our inference from causes to effects ; the latter on that from effects to causes ; either of which is at variance with the principle of sect. 223, which cannot admit the like to be the cause or the effect of the unlike ; but only that the like should imply the like, and be implied by it.

233. What *is*, it appears then, being not what it ought to be (sect. 66), a more serious investigation is required into things ; whose nature it must be in the end not to be other than rational (sect. 37, 183). Now *Impressions* existing only by being *perceived* (sect. 34), such errors in these as *maintain* themselves against Reason must remain uncontrollable (sect. 98, 99, 120). The *Natural World*, on the other hand, may be equally *imperceptible* as perceptible, inasmuch as natural being does not proceed from or immediately depend on the soul (sect. 128). Accordingly those sensible things which form the counterparts of Impressions need not of necessity oppose, like Impressions, a lasting obstruction to Reason. They may be considered rather to offer an opening, like the

cave of the Sibyl, into an insensible World behind them. It is accordingly in Nature that we may suppose the entrance to lie into that imperceptible World in which those final ends must be fulfilled which are necessary (sect. 182). In it those objects that are exposed to sense, and which the most familiar names denominate ; as sea, air, wind, earth, flame, heaven ; need no longer figure ; since they must now appear doubtful instances of existence, as being imperfectly able to fulfil the purposes of Reason in Nature.

234. It might appear at first sight impossible either that we should discover, or, when we had done so, that we could investigate, an order of beings so remote from sense as that supposed ; or attain the power to collect the instances that must be used for their explanation (sect. 224). And it must be allowed that we can never cease to depend on that world of which our senses afford us the knowledge (sect. 136) ; the only means of our investigating Nature must be taken away if we did. The world of sense may however be used as a *sign* (sect. 88) of one which passes beyond sense : and by holding to the one we may reach the other. What is itself imperfectly rational may imply what is more so (sect. 84, 139-141, 185) : and by what such a thing then *means* it may receive its own explanation. A being may be signified very different from itself (sect. 61) ; but it will not be the less interpreted by that *other* existence. In consequence, the world we hear, smell, see and touch may acquire for reflection an end or function which it had not, and which was not hitherto suspected to exist in it. There is a resemblance of the Natural World, we might suppose, to an unknown Oriental writing which, admired in the first place for no more than the beauty of its characters, is afterwards appreciated to possess a meaning capable of being deciphered.

235. However the intelligible world be composed, it cannot be thought in its *essence* to be unlike the world which it supersedes : whatever its materials be we must conceive it to be formed upon the same model as that world with which we are already acquainted. Nature might be supposed to contain colours unknown to ourselves, and to consist of objects of four and not three dimensions (sect. 61) ; but it cannot, *unimaginable* though it must then be (sect. 48), elude that *Reason* for which it can, in these circumstances, alone exist. Reason must be as familiar with such a world as with that to which our senses are open. And as its *origin* in our knowledge (sect. 127, 128) ; our possible *sense* (sect. 136) and *imagination* (sect. 147) of it ; its *expansion* (sect. 149-164), and various *motions* (sect. 185-203) must accordingly follow the principles which condition and model the world of sense ; so it must be the work of Reason to assign to it, in the pursuit of those ends which gave the mind the right to conceive it (sect. 233), some sort of insensible *substances* and *species* (sect. 183). *These*, whose actual determination must *complete* the soul's knowledge of Nature (sect. 183), might be conceived to be constituted as those are which form Nature's sensible structure (sect. 167-176). It would be reasonable to suppose everything, though in appearance simple, to be formed of many *definable substances* too remote from the senses to be perceived. The things we invent contain a multitude of *substantive* parts ; and such are, again, members of *species* and *genera* : a wagon has a *body*, *axles*, *wheels*, *rims*, *shafts*. Every plant and animal has *organs*. And it is to be thought that everything which the senses report is perhaps made, in the same way, of classifiable substances which are insensible and perhaps by ourselves not imaginable ; but which, if we could perceive them and their changes, would discover a harmony with Reason which is, in their outward appearance, wanting to them (sect. 183).

236. Such insensible substances and species might contribute with the other features of Nature to the complete fulfilment of Reason's purposes in the world (sect. 183). But Reason, in this as in other instances, may take some novel colour from experience (sect. 121). And experience in this case points in fact to another view of the constitution of the substances and species of Nature: a view which, depending upon the special characteristics of body, finds in motion the condition of all things. It has been commonly recognised that bodies hold a privileged position among things. And this is a view which seems to be supported by reason. For, in the first place bodies may be said to be the only existences which wholly comply with the definition of physical being (sect. 127); while, in the second, they exclusively control and support other qualities (sect. 172). Although the insensible world cannot be supposed for these reasons to consist *barely* of bodies: since the qualities of colour, sound, smell, taste, weight and so on (or at least those things of which they are signs; see sect. 234) could not be *removed* from existence without at the same time removing that reason for which an insensible Being must be itself supposed (sect. 179, 182, 232); yet the real world may, notwithstanding, be thought to be formed of bodies which, being smaller, and perhaps of another constitution (sect. 164, 234), than the sense perceives them, are able by their *associations* to serve as conditions of the existence of the subordinate qualities. That *immediate* connexion with body which was before entertained in these qualities (sect. 168, 235) need not, then, be considered the only means of their existence. And they may also be conceived to appear or to disappear as the motions of bodies cause body to acquire or to lose connexion with body. To congregies or systems of bodily particles the function may thus be assigned, of affording to a subordinate quality its needful support (sect.

168); or of causing a quality, on an alteration of the motion or the velocity of such particles, to change in connexion with them (sect. 117), in a natural harmony with Reason. Suppose our *senses* had been so acute as to admit of our connecting heat, sound, colour, and the like, with such systems (sect. 89). Heat, sound, colour (or perhaps those things of which these are signs) must then have intimated for their physical *causes* (sect. 83, 94) pulses and vibrations—unions and disunions of mobile particles. And we must have perceived these particles in turn producing as *effects* those physical qualities.

237. It might be natural to consider an Object so remote from sense as perhaps no more than a kind of airy and unsubstantial phantom of Reason. And yet, if we consider its purpose (sect. 233), we may discover it, I think, to have its source in that to which our knowledge of all other forms of existence may be with reason attributed (cf. sect. 132). There is a natural or pre-established harmony between the mind and existence (sect. 67). And the one cannot require an experience without the other's fulfilling it. The consummation of this Reason, in adding to the mind's present conviction the *final* one presumed in sect. 183, must lead us to believe that this world;—while arranged, like its prototypes, to surrender through the deterministic principles of substance and species its difference and indeterminateness;—must be equally able to illustrate that more active principle on which these conceptions depend (sect. 86, 183); be seen to be the result of design; and thus reach that condition to attain which is the highest perfection of its nature (sect. 118).

238. Microscopes reveal a world which wholly escapes the eye. Porous vessels show the parts of matter to be

smaller than we actually perceive them. And the passage of negative electrons through sheets of certain metals seems to afford a proof of the extreme minuteness of these bodies.

239. The world which the needs of Reason seem to pre-figure may, then, be believed on empirical grounds to exist. And of this the *laws* of the sensible world also afford proof by furnishing evidence of the existence of insensible things (sect. 234). Dalton's observation that, in a mixture of gases, each gas exerts its own pressure led him to suppose minute, insensible parts in the composition. The discovery by Gay-Lussac that the volumes of gases which unite stand to each other in a simple ratio suggested Avogadro's interpretation, that equal volumes of gases, under the same conditions of pressure and temperature, must have an equal number of molecules. Such instances unite in showing how the things apparent to sense signify others which are withdrawn from it.

240. However certain we may be on these grounds of the existence of an insensible world, it is perhaps reasons of a mathematical nature which afford the likeliest intimations of its existence, and of something even of its real constitution. The suitability of Mathematics as an instrument of physical science originally depends on the circumstance that *motions* may themselves be counted among the changes of Nature (sect. 214); and be in consequence referred to that principle which determines her differences (sect. 223, 224, 230). What motions, for example, may be expected from the *impacts* of bodies must depend on our observation of what generally happens when bodies collide. Bodies must, in the same way, be supposed to move in *concert* when the changes which they present invariably occur in each others' presence, and not otherwise. Such determinations introduce conceptions of a more quantitative order. From describing lines and curves which lead, in connexion with

other quantitative factors, to analytical or geometrical deductions, bodies naturally suggest mathematical hypotheses respecting the behaviour of motions : if observation then accord with them (sect. 96, 224), a residue of empirical *definitions* of motion (sect. 94, 223) justifies the mathematical conclusion. The quantitative relations of moving bodies thus furnish the opportunity for the mathematics of the *Principia* of Newton; with the hypotheses of which observation in general agrees, and which in consequence affords a definition of the motions of all stellar and planetary bodies. It is a mathematical instrument which has led some recent mathematicians to deduce, in connexion with a different interpretation of the *visible signs* of the astronomical bodies, a new definition of the actual motions of bodies (sect. 192). Not every principle indeed which can be arrived at from the *a priori* elaboration of the properties of space and number (sect. 162) contributes to determine the laws of bodily motions ; yet these motions have themselves led to the contrivance, in the abstract mechanical sciences, of new forms of mathematics, from the signs of mathematical relations which they suggest.

241. The determination of the situations and motions as well of the *particles* as of the masses of things may thus be made practicable, or facilitated, by the use of mathematics : which can be as easily applied to the minute (if anything be known or admitted of it), as to the largest body. Mathematics (which are thus employed at first with a view principally to ascertain what the laws are of natural *motions*) enlarge their scope when they promote in turn the interpretation of the laws of changes more properly so called (sect. 213). For these changes again, through their causes (sect. 236), furnish premises or data which allow of our drawing *a priori* mathematical conclusions with respect to them. Mathematics are thus insinuated into things through the

contrivance of measure : an operation which depends upon our establishing inductive relations between *motions* and *molecular systems* (sect. 236), upon the usual terms (sect. 223, 224). Thus motion in a body is discovered to be associated with the weight or heat of substances ; there is then transferred to these signs of molecular systems (sect. 234) motion's own spatial property (sect. 214) ; and this, being divided into units, like the gram or the degree, provides the readings of the balance or the thermometer.

242. The numbers which become fixed to things through these means afford hypotheses respecting all the properties of physical systems ; which experiment may establish or overthrow (sect. 236). In pointing to the real constitution of things such numbers are very different from those which are referred to objects in the simple operation of *counting*. Counting considers no more than the quantity of things when being assembled or divided (sect. 96). *Scientific* numbers have a higher power of probing into their design and formation. Things acquire in this way such various properties as their specific gravity or relative heat ; the numbers of these are fixed like labels to things : and it is then a simple matter (supposing the numbers obtained) to deduce hypotheses about the character of any atom or molecule which they may qualify. A simple example is supplied by the arguments that chemists like Mendeléeff have used from merely observing, in connexion with other physical properties, the generally uniform progression in the value of atomic weights. Any large deviation from that relation leads them to surmise the existence of elements hitherto undiscovered. And it may happen to them to conclude, upon such grounds, that the weight inductively ascribed to an element must be re-determined. Such considerations seem to suggest and to give a likely hint of the character of that of which the senses can only furnish symbols or premises (sect. 234).

243. A World thus approachable (although still so difficult of access) must perhaps always remain obscure to us with respect to its details (sect. 235). And yet it may be not unreasonably thought to rise above those errors which in some measure confuse the sensible world (sect. 173, 232). That it can be considered generally exempt from these defects seems to be implied in its existence ; for it can be supposed to be with no other end than to conform to Reason (sect. 237). Perhaps there is not anything which on the narrowest scrutiny might not be found to have eliminated the main errors which disfigure the world of sense.

244. Only the extremity or fringe of things lies open to sense (sect. 234), but we need not despair of looking deeper into them with the eye of reason : in conformity with which the Intelligible World seems to be formed of insensible particles which, freely streaming or closely united, support the hidden qualities of things (sect. 236). Heat is associated, not with any single body, but with different particles in motion. The like is true of sound. Colour depends on the structure of body. In weight two bodies at least are implied. And only odour and flavour might perhaps be supposed to inhere in some form in the very particles of things ; though whether, were our senses much sharper, we could smell and taste a particle may reasonably be doubted.

245. Electrons, molecules, cells—these, or the yet more intelligible forms they may be thought to imply (sect. 235)—are, it seems, the things of which those that we can touch, see, and hear are the signs or appearances (sect. 234). The principles of *Substance* and *Species* seem, through such systems, to be realized in an insensible world (sect. 183). And the source of this rational order may be reasonably thought to be motion (sect. 183). By this things are, it appears, both

changed and maintained (sect. 236); and by its means there seems to have been produced at last, from one root or many (sect. 117), in the long course of evolution, all that we perceive or can infer in Nature.

246. These considerations may, on our principles, like stepping stones, be expected to bring us where the *cause* of change may itself become evident (sect. 182). *Why* substances and species rise and decline is what it remains finally to consider. We have, in hitherto determining the existence of these systems, determined what is the nature of those *laws* with which change must *comply*; but not that deeper principle which these laws must themselves *depend* upon for the particulars which successively illustrate them (sect. 86, 183).

247. A true explanation must fulfil two conditions: first, it must have a *Mind* to maintain it; and secondly, an *Experience* to comply with its principle. Now two kinds of explanation might be conceived to which the change of Nature may conform: of these the one is a pure deterministic principle, the other a teleological (sect. 113). The *first* of the two principles will, I believe, appear still less likely than it did in *Part I* (sect. 114) to secure that explanation of change which is necessary. For it may indeed seem possible to explain the change of things by conceiving their motions to be completely *determinable*; and this belief the progress of Astronomy has no doubt in some degree seemed to encourage. When, however, we consider what is *implied* in such an explanation, it seems evident that it relies upon a fictitious, incomprehensible *Mind*. For that a mind might manipulate an intellectual instrument of this sort, some initial distribution of all the particles of the universe must be together present in its intelligence. But

when it is considered that finitude characterises the mind, but infinitude, Nature (sect. 127) ; and that there is and can be no enumeration, calculation or computation of all natural parts (sect. 135)—when this is considered it seems that this principle wants the *first* necessity of an explanation ; viz., any *Mind to maintain it*.

248. Such a principle might, notwithstanding, find in an experience *manageable* by the mind the marks of Nature's determination ; and the explanation of Nature's phenomena by a few mechanical principles might then not be impossible. But *experience* in turn appears now uncongenial to this principle. And the *second* condition of a true explanation seems to be wanting. For if the course of the World were determinable, the World's successions, as being without end, must be observed to occur in some cycle or cycles (A, A, A, A, A, \dots) (sect. 114) ; and Nature must, like an immortal hydroid, manifest some determinable rhythm or rhythms of change. But of this requirement of any mechanical principle no sign (sect. 234) appears in the Natural World. Like those trains of impressions which form the archetypes and originals of physical change (sect. 114), the World seems conspicuously variable. Age follows age, and all seems continually to be *renewed* in it. And there is nothing old under the sun.—A deterministic principle cannot, accordingly, satisfy both together of the requirements of a rational explanation. For *Experience* being supposed to comply with it, it wants a *Mind to maintain it* : but a *Mind to maintain it* being supposed, it wants an *Experience to comply with it*.

249. The failure of this principle to accomplish its purpose in Nature lends a final support to the conclusion which we have been endeavouring to establish, that the constitution of the World by the categories of Substance and Species implies and depends on a *teleological* principle (sect. 86, 115, 183).

That the career of Nature will not bear the yoke of a *deterministic* principle seems only to afford a last proof of what we have, on grounds as I hope sufficiently vindicated, believed to be necessary. Returning accordingly to this conception we shall attempt in the remaining sections of the present Part to show how, through this principle, *Mind* operates in the World ; imparts life and force to it (sect. 230) ; and is the responsible author of those things which embody the laws of Nature. That natural things "are derived from, and depend upon mind and intellect" has been in the past an opinion of many philosophers. And certainly no other opinion seems to accord so well with the reason of things. No opinion will, I know well, be more likely to stir the doubts or the prejudices of men. But when truth is "the chief passion" there can be no unwillingness to pursue to the end the consequences of a conception which, while it satisfies the soul (sect. 28), does not neglect the laws of Nature (sect. 246).

250. To those who consider that the activity of Mind in the World, by transforming her into a *natural* thing must pervert her essential character, it might be replied that the relation of the Mind to Nature is not that of one natural thing to another. No such relation exists between them. It may be granted that so long as the mind *continue* a mind, she cannot immediately influence a thing wholly remote from herself (sect. 128). It may not, however, follow that the mind must be without any effect in Nature. It need not be objected to a teleological principle that it must fail in the *first* requirement of a true explanation (sect. 247). For Nature and Mind have a connexion of *their own*—a connexion closer than that of body with body. (Sect. 144). This connexion is not wanting in the case of change. (Sect. 181).

Nature may be in this case compared to a mirror. A man looking into a mirror can excite motions therein which, although independent of himself, yet occur only at *his* instance (sect. 189)—and so the soul, when seeing in the mirror of Nature innumerable motions arising in a connexion with sensations formed by herself *within* herself (sect. 119), cannot then fail to be aware at once of the existence of motions and of her own part in them (sect. 187-191).

251. Mind then being supposed able in this manner to control physical motions, may be supposed by their means able to control all things in conformity with natural law (sect. 236, 245). If motions therefore, being not mechanically determined (sect. 247, 248), may be also directed by Mind in a way to account for our *experience* of Nature, we may then probably assure to this principle the title of a rational *explanation*. And as by reason of Nature's constant variety experience was inconsistent with a deterministic principle (sect. 248); so by reason of that variety experience may consist most naturally with a teleological principle. For the nature of Mind is such that, while she looks for variety (sect. 118) she can, without experience, never be sure of producing anything else: those *laws* which are involved in her activity (sect. 86, 237) are never unmixed with *empirical elements* (sect. 95, 224), and therefore she can never discover without observation what she may be contriving in the World. *Hence*, we may think, the strange shapes which arise in Nature; its caprice; its opportunism; and that versatile appearance which might extort from an observer the words of Cleopatra's admirer:

Age cannot wither her, nor custom stale
Her infinite variety:

so much may our experience, I think, be reasonably thought to be consistent with the activity in the world of an intelligent and inventive *Mind*.

252. A physicist evolving artificial from natural substances ; a painter, beauty from a confusion of colours ; a poet, rhythms from a chaos of words ;—such illustrations may perhaps serve to represent how Nature's gradual changes should be considered by us : and with what principles we should attempt to approach her. If it must be idle to explain the character of any artificial substance, work of art, or verse, without considering the mind which originally disposed and set in order the several parts of those systems ; it must equally be in vain, when we look for the causes of things, to take the life of Nature's living systems : which, although coherent, beautiful or rhythmical in virtue of their own natural laws, can never be rightly supposed without Mind to have been evolved from an unconscious World.

253. Not that we shall be therefore competent to treat with any degree of completeness of the real causes of things : for we are ignorant who these "physicists" and "artists" of Nature may be. That we are ignorant, however, may be granted, and is no new thing. Many ages elapsed before the physical world of Heraclitus or Plato might begin to assume in the minds of Copernicus and Columbus its modern proportions ; and as many again may conceal a realm of intelligences, to ourselves as impenetrable as were suns and continents in former times ; although its works may be all around us. Mind is invisible and cannot be approached by the senses. And we can judge of it only by the signs of things which are, as natural, perfect without it (sect. 127). It seems that we cannot arrive at any sort of determination of what Nature must have been if left to its own devices : or conclude with any certainty what are its artificial, what its natural, motions ; or what may perhaps be composed of either of these. And yet the attractions and repulsions of atoms ; their resultant organisation ; their increasing

order, symmetry, and variation ; may be considered as signs apt to betray the influence of Mind in the World. It may not be too hazardous to find in electrons and protons the first purposive movements (sect. 251). The birth of the elements afterwards—systems, it may be supposed, of electrons formed in concentric rings round a centre—may be conceived to intimate a next step in the intercourse of Mind with the World. And a third may perhaps be found when we observe the elements in their turn (at first so many independent systems) being as it were fastened and riveted together ; until step by step, as nebulae contract, the diverse gases, and then liquid and more solid bodies gradually appear.

254. Mind is not, we may think, the immediate master of its purposes. And it may only by gradual effort learn how to express itself in the World (sect. 251). If the parts of inorganic Nature seem to bear in them no more conclusive traces of Mind than a stone arrowhead ; yet these traces presently appear as unmistakably as in weapons of iron. The judgment of Paulina on the mysterious statue—

That she is living

Were it but told you, should be hooted at

Like an old tale ; but it appears she lives,

might seem as true of Nature as it was of Hermione. For protoplasm, like a hazardous trial and experiment upon Nature, being in time evolved in the World, *that* has appeared which is by all allowed to be animated. This living Form, and changeful, inconstant Substance ; at first, like an inorganic system, increasing by a union with things of its own kind ;—dividing and again in an act of conjugation uniting with others ; in harmony with reason (sect. 248) seems determinedly to evolve its materials, until two several forms have appeared : one the more active, various, experimental, and male ; the other, more self-contained, quiescent and female.

255. Biologists have shown how cells at first drifting lead on to harmonious systems to form in the end the plant and the animal. The effort to be sometimes observed in protozoa, upon dividing, to associate their parts, seems to throw a clear light on the real mover of Nature (sect. 251). He who can consider these endeavours, and yet deny their intention, might even to the last perhaps have deemed Hermione still stony.

Though yet she speak not,
Nature seems to grow more and more animated.

There is an air comes from her ;
and mind at last seems to express itself in growing membranes
and cells as distinctly as in buildings of human construction.
The earlier metazoa lead on to forms of a more varied description.
These introduce more complex successors. And
these in their turn evolving in a gradual succession the chief
forms of Nature, with *man* there at last appears in the World
the most peerless piece of earth
That e'er the sun shone bright on.

256. A body of such a kind, evolving without end and for ever youthful ; whose form the fancy did not perhaps contrive in the body of Aphrodite or Apollo without signifying the soul's ultimate designs on Nature—a body so devised might, I think, seem, through the artifice of *generation* and *birth*, to have been actually aimed at in Nature. For, as by *regeneration* the soul seems to bear to the maimed body claws and horns, or other bodily *members* after their kind—so also by generation and birth does she seem to reproduce the *whole* body. So that in this manner, eluding the relapse of the body into its primitive lifelessness (sect. 252), she may carry on to the end, by means of new bodies, her purposes in the World.

257. If we enjoyed a complete intercourse with every

sort of mind, experience might clearly have taught us whether the body had in any instance attained to such immortality ; and whether we might, in consequence, assign to this cause the presence in the offspring of plants and of animals of the parental shape and mind ;—the skill of creatures, and their *habits* (sect. 82), which, as tending in a later body to evince the several aptitudes acquired in the interests of an earlier, must appear the creature's *instincts*. Perhaps the habits of the bee, the customs of the wasp, and the skill of the caterpillar spring from no other source. And certainly the facts upon which the doctrines of transmission and heredity rest seem to lend not a little colour to the supposition that the same soul may extend her influence through a long train of bodies ; an effort which, perhaps bearing its full fruit in the less complex forms of plants and of animals, may not have totally disappeared even in the higher creation.

258. *Other Spirits* must, notwithstanding, be also acknowledged as in the end entering into and controlling the child-body ;—a circumstance which, although, no doubt, apt to modify the influence of the original parent, must at the same time serve, by reason of the kindred aims and nature of Spirits, the same purpose which the soul itself had in at first contriving the body. Such Spirits are like bearers who successively receive and pass on a brightening torch : for so an endless succession of Spirits might seem to take up and to pass on the evolving body ; which, by reason of their undecaying activity, fails not, then, to attain its part in ever-increasing youth and immortality (sect. 256). In such a way it might seem that the desire of Reason is continually being fulfilled ; although the manner of it remains hidden from us. For he indeed who believes in the activity of Spirits may perhaps divine by Reason the nature of the

motive which incarnated them (sect. 249); but only by an experience which eludes his present research might he determine what it is that impels a Spirit to this seed or that—what influence, perhaps, of the body; or sympathy of the mind. Some analogy with a material birth may be not improbably found in the activities of Spirits supposed discarnate. For discarnate Spirits have at times seemed to make use of the body of incarnate mediums;—have seemed to be *born* and to have come for a time to *life* in them;—and in the members of persons still living manifested something to be likened, perhaps, to the instincts and hereditary impulses of animals, although whimsically and uncertainly. Such cases might, perhaps, in our confined view of things, be considered as a rude image of a spiritual birth in Nature.

259. The hypothesis of Spirits as playing a part in evolution with the original *mind* is confirmed from other sources tending to show that an unending multitude of spiritual beings must be likely to exist as controlling forces of Nature. For the soul's inability to direct the motions of an *Infinite* Existence towards that end in harmony with which she may determine a *finite* number (sect. 250) implies that any such parts as remain outside the radius of her actions must persist in that primitive state (sect. 127) whence she has raised a certain number of things; unless the principle of Spirits, partners with herself in her purposes, be entertained.

260. That *anima mundi* or soul of the world by which the Whole was in ancient times thought to be animated (sect. 249) may thus be regarded as the shadow of a more substantial opinion—of Nature as the body of a *multitude* of Spirits. Of what limits and shapes their bodies may be; of what sorts the minds are which control them (sect. 218)—these and the like questions our present means of knowledge are incompetent to determine. The myths of Pan

might be no more strange than their actual answers. And yet we are not without *some* knowledge of bodies ; and of minds actuating them. Many individual forms of *animals* and perhaps too of *plants* may be distinguished by ourselves in Nature ; and a diversity of intentions and affections which correspond to them.

261. The evolution of those complex weapons of defence, and not less of offence, which are to be observed in the body's members constitutes the outward sign of those inward divisions which such a partition of bodies occasions in spiritual beings. By combining with or adding to those original structures which the body's *essence* comprises (sect. 255-256) such organs or contrivances as make the bramble thorny, the deer fleet, or the snake poisonous, the mind evolves at length in the body its final structure and features.

262. Such different organs as are contrived to this end must be expected to be suited to and congruent with the never-ceasing change which the evolving body must undergo conformably to natural law : such organs must therefore themselves appear haphazardly or incidentally (sect. 251) ; be fugitive, transitory and little deducible : as suiting now one kind of life and now another in the various circumstances of place and time.

263. Among these important, although undeducible, systems, one which occurs in animals seems to require particular notice. Animals possess *organs of sense*. Now it may, I think, be probably supposed that the use of these organs to the *bodies* of animals is the real reason of their presence in the body. The singular difficulty which attends the interpretation of the organs of sense would seem to spring from the impossibility of deriving them from any admissible principle of *reason*. To the question why the animal mind should not be clairvoyant it has in fact been generally found

impossible to give any rational answer. A *biological* explanation does not meet with this difficulty. And the evident advantage to the *body* of animals which must arise out of their possession of organs of sense may, I think, lead us to connect these organs with an empirical or biological principle. In order to explain what I conceive to be the use to the body of the organs of sense, I shall consider *first* the nature of the clairvoyant soul, and *then* the nature of a soul which is embodied.

264. A mind may, on our principles, have a complete knowledge of Nature without any use of an organ. At first, we have seen, *impressions* arise in the mind by chance (sect. 42) or intention (sect. 77): these then assume through the *mind* the form of *sensations* (sect. 140); and by these sensations the mind is made aware of some limited part of the World (sect. 186). Thus a knowledge of Nature is obtained which is in no way concerned with the body. Wherever any thing be, the mind might perceive it. And there is nothing to forbid her receiving or exciting sensations of natural objects however remote from her body.

265. To assume now the *presence* in the body of organs of sense. These organs, being material *media* of the mind's sensibility, must limit what we may term the soul's *rational* field of perception (sect. 264) to what can fall into some *physical* relation with those organs. The soul's sensations must thus be restricted to objects having some physical connexion with the *body* (sect. 221). Therefore any sensation, whether excited in, or formed by, the soul must now imply *an object of interest to the body*. Such an empirical addition to the soul's *rational* means of perception must accordingly contribute to the animal's purpose to secure and maintain its body. It is true that such a device may at times *accidentally* leave the mind in communication with things that have no concern with the body. Thus some

view of the *stars* and of other astronomical objects happens to be still possible to us. But almost all objects which animals discern have some *practical* connexion with their body. Nor are there in fact *any* to which the instinct of the animal mind does not attach an immediate and instant importance. The infant, for example, supposes the moon to be in his reach. And early psychologists thought that colours and other physical things must, in order to be perceived, make some contact with the body.

266. The animal mind could not, it is evident, be in the possession of organs without immediately or automatically referring its sensations to some part or parts of its *body* (sect. 89). From this association results, I conceive, the *second* advantage which the possession of organs may bring to the body. For the irrevocable localisation in the body of the *sensations* by which the soul *recognises* the objects of Nature (sect. 140) must lead to this useful consequence :—not only must the soul now perceive, by means of any sensation, an object of practical concern to her body (sect. 265), but she must, whenever perceiving, become automatically *aware of her body*. The soul must seem now to *live in her body* ; and whenever acting (sect. 77) or suffering (sect. 42), to act or suffer in it. I say that the sensations of all natural things must, in the case of the animal, be referred to a few bodily *organs* ; which, although in themselves, like all other natural things, unconscious, must, to the animal mind, seem to be *sensitive* : as the *eye* : which being itself an unconscious substance or insensitive body placed among others in space, must also, in virtue of its being that to which the sensations of colour are universally referred by the soul, appear *conscious* and *sensitive*.—It seems to me that animals thus derive from the possession of organs, *first*, the advantage that the natural objects perceived by their minds have a direct concern with their bodies ; and *secondly*, that

their bodies become at the same time automatically responsive to every object which their mind perceives. Animals, I suppose, could not have arisen unless their experience had been in some such way related to their body and their body's environment : so much, I think, must their body's existence depend at every moment on these relations. Advantages of a high speculative order might no doubt attend the clair-sentient mind ; but the animal must in the enjoyment of those advantages have been ever in the predicament of the philosopher who, in his admiration of the starry firmament, fell into a pit at his feet.

267. I shall now try to deduce some of the more *particular* consequences of this empirical principle. First, this principle must imply in animals the power of moving their whole body (sect. 250) from one place to another. For the organs could be of no use to an animal which, though prompted or warned by their means, yet had no power to advance or to withdraw its body from one into another environment. Thus it may be surmised that, in a connexion with this power, that system of incoming and outgoing currents called the nervous system may in the long course of time have arisen with the principal purpose of securing the existence of finite bodies. We must, then, expect that when in any body no motor system exists, there will be no sensory traced either : and so it has in fact been found to be with vegetable bodies ; which possess, it seems, neither the one nor the other.

268. Next, this principle must be thought to involve that animals can have no sensation of any *physical body* without some *immediate* contact therewith of their terminal organs. Bodies alone can inflict injury on the body (sect. 221). And to these then, at least, the organisms of animals must be *directly* related (sect. 265). No foreign body can then impinge on an animal body, but the animal will be at once

aware of that circumstance (sect. 266) : the organ being thus the adroit monitor of the mind, animals may, upon being warned by it, through their power of movement withdraw themselves from the vicinity of what has thus been brought into an immediate physical connexion with their body (sect. 265).

269. Next, the eye and ear, and the organs of temperature, may likewise be accounted for by a principle which, confining the mind's perceptions of Nature to objects having some concern with the body (sect. 265), at the same time implants in the *body* those restricted perceptions (sect. 266). I might, I think, enjoy the same *experience* of things without the eye or ear, or the other organs (sect. 264) : but, being deprived of those points of reference, I could determine directly of nothing whether it was, or was not, near my person (sect. 265) : I must be where the objects of the world were engaging my bodiless senses, and not, as now seems to be my case, "inside my body" (sect. 266).

270. Lastly, it may also thus be explained why the *signs* of sounds and colours, and of other qualities (sect. 163, 169), always appear to the animal as nearer or farther from its body. For the loudest and brightest signs implying its power to touch that portion of matter in which they inhere (sect. 168) ; and to touch this portion of matter now implying the *contact* therewith of the animal's *body* (sect. 268) ; it follows that the animal's body being *nearer* to any object the signs of that object should be more loud and bright ; but if farther, less so.

271. It follows, in conclusion, that, as animals now are, sensations must be perceived by them not without some use of physical organs ; which though of necessity idle without some receptive (sect. 42) or active (sect. 77) power to afford to each one its function of *sense* (sect. 140), yet notwith-

standing fail not to limit and restrict the experience of animals to what may be of use to their body. For sensations being referable to organs, and no unembodied sensations existing, it follows that the animal enjoys sensations only as they are referred to this or that sensitive part of the body (sect. 266); and through it to things in its nearer (sect. 268) or more remote (sect. 270) neighbourhood (sect. 265).

272. It remains to mention some further changes which the animal soul may be thought to have undergone through the body. As the animal's *symbolical* (sect. 268-271) so too its *unsymbolical*, impressions (sect. 142) seem to have been brought into relations with bodily organs. Such impressions are unable, like sensations, to refer the soul to its *environment* (sect. 142): but, having acquired, like those sensations, a place in the body (sect. 266), they may then be of use to the body, by consistently implying either on the one hand its advantage or on the other its disadvantage. Those pains which we term *physical* are themselves as completely psychical as are the sensations of sounds, colours, or odours. They belong to the soul and not to the body. And there is nothing painful in their character as *impressions*. But in so far as (on account it may be of the nature of the organ to which they are referred) they have come to imply the *harm* of the body, they may be thought to acquire by that association their painful, or disquieting, character. Like those *pleasures* which are also termed for a like reason *physical* or *carnal*; their natural character seems to be so far changed that it is in general impossible to apprehend them as we do impressions which have not their significance. *Relief* welcomes their disappearance; and the pleasures of *appetite* distinguish things which, like food and drink, contribute to their removal. These are feelings reserved for impressions which communicate to us the knowledge of our body's

condition ; and they seem to be consistent with the notion that the advantage of the body is the cause of the soul's intimate relation to it.

273. Having considered the use to the body of the organs of sense, we should next consider the *possibility* of their originating within the body. We have to inquire, first, into the *physical* conditions involved by an empirical relation of the soul to the body ; and then into the *psychological* conditions. In the first place, the organs of sense being themselves members of the body must be held to have arisen from the same cause which brought the body itself into existence. Accordingly the reasons which attribute at once to the Mind and to Nature the cause of the body (sect. 249) must attribute to these equally the formation of the organs of sense. The activity of the one must engender the law of the other. It will at least not be denied that sensitive organs may as easily be produced as insensitive ; and that the animal, which might form or renew a claw (sect. 256), might form or renew an eye :—as the *Triton* ; an animal which is said to exhibit a singular power of regenerating the *lens* of its eye ; and may, then, be reasonably thought to use a similar power when at first forming it (sect. 256).—See Macdougall, *Body and Mind*, p. 240.

274. It being, in the next place, in a connexion with what is perceived by the soul that the organs of sense are evolved (sect. 265), these structures could not have realized their intention unless some physical relation might have arisen and persisted between them and the things of perception (sect. 268). The organs in consequence must be formed of material particles ready to be set in motion by those objects of sense to which they are related ; a *contact* arising between object and organ ; inasmuch as contact is the means by which relations of a physical kind occur in Nature (sect.

221). And thus, accordingly, with the organ of touch ; whose particles, on coming into contact with its own or with alien bodies, are set in motion.

275. Sounds and colours being in general merely signs of a matter remote from the body (sect. 270) ; it follows that neither of these qualities can be physically associated with its respective organ save upon its stimulation by materials acting as intermediaries between the organ upon the one hand and its objects upon the other. And stimulated in this way each of these organs is ; the one by air (or other elastic medium), the other by the ether.

276. These materials being then, not the causes of sight and hearing, but only the media whereby animals are able to refer what they see and hear to their bodies ; it must follow that the ether has no direct connexion with the actual *existence* of colours ; nor the air with that of sounds. These colours and sounds (or those things of which these are signs ; see sect. 234) exist, we conceive, as parts of the Natural World, in an association with material systems (sect. 236). That all bodies are soundless and colourless is a view which concurs with the notion that the ether and air are the real *causes* of sight and of hearing ; for sounds and colours, being then considered to be formed only in the *mind* by media which are themselves altogether devoid of these qualities, can be no more than psychical or mental ; like our emotions, fancies, or memories. It may, I think, be considered as a support of our principles that upon this view these qualities can be no more than *impressions* (sect. 15) ; for being *confined* to the mind, they can *signify* nothing. Now it seems irrational thus to deprive the soul of its *senses* (sect. 140, 165) ; to remove its sound from the sea and its colour from the poppy ; to *unfurnish* the World ; to reduce Nature to matter and motion ; and, in consequence, to conclude the science of change by denying what was the first, and must

remain the real, subject matter of her inquiry (sect. 179, 225).

277. It remains, in the last place, to consider the *psychological* conditions implied in the relation of the soul to the body. It must be asked how the soul brings its sensations and impressions into *association* with the motions in the organs which it is at the same time contriving (sect. 273); for it must no doubt appear very mysterious why sense and organ should be so closely interwoven as they are found in fact to be. How might sensations and impressions, if they be not naturally and originally related to a sense organ, become so? It is possible that the reason of this perplexity lies in what must, I think, puzzle reflection with respect to all the spiritual functions of the body. The use which we make of invisible, inverted images on the retina; of motions set up in the brain by us when moving, talking, or the like; of a nervous system and of its functions generally;—all this, with the development and growth of such structures, seems to have been hidden from sight by the blindness of instinct (sect. 82, 257, 258). Consciousness deserts instincts which are exercised without *interruption*: and pre-eminently of this sort must these original instincts be. We cannot expect, therefore, with the means at present at our disposal, to throw much light upon the progress of the soul's intercourse with the body. And yet he, I think, would go too far who said that experience itself could not discover to us a *similar* connexion. Sir Walter Scott, for example, speaks of a boy whose memory, imagination and other faculties were curiously associated with a material thing—namely, a *waistcoat button*. We are told that this acted as an organ of reflection and of memory in the boy. (See Lockhart's *Life of Scott*, i, 94.) This association, although almost ludicrous, may be in truth hardly more whimsical than that

connexion of the body and soul which it seems only to parody. I say that, if we could see into the truth of either case, we might find a real likeness between them. Those who find in the organs the *cause* of our sensations must in that case own themselves oddly mistaken. And I think it will save thought from many errors to suppose that animal organs have only by degrees come to be implicated in the life of the soul ; that they were by gradual steps completed and brought to perfection, and even extended, in a like though a blinder fashion, to embody, in new materials, natures *akin* to sensations—*i.e.*, imaginations and memories : until in the end there arose that general correspondence between mind and its organ which has puzzled so many thinkers.

278. Some lapses from this schoolboy's grotesque condition might no doubt have been observed by a clever observer ; and lapses may be also observed in the case of the soul. For some *dissociations*, which may reasonably be thought to afford momentary instances of a spirit's *natural* state (sect. 264), seem at times to *divide* the mind from the body. There are not wanting, indeed, many instances of what seems to be the enfeeblement or breach of the acquired association of the mind's sensations with material systems. Of this phenomenon many instances and kinds of anæsthesia supply illustrations ; for all these appear to be of psychical, and not physical, origin. What corroborates this supposition is that dissociations of the sort seem to be not seldom united with a power of seeing, hearing, and being otherwise sensible without the use of an organ ; as in the case of "witches," fakirs, and other hysterical persons. The minds of these patients seem to have been in some degree released from the influence which the principle of natural selection may be supposed to have riveted more securely in other minds. And this is intelligible on our principles ; but must be impossible

to reconcile with the supposed activity of physical laws (sect. 276), which must be overthrown by such instances.

279. What may be true of human creatures need not be less, and may be more largely, true of less developed beings. Whether the lower animals have brought to a final completion the task of interweaving the soul and body ; whether the scope of their experience may be wholly deciphered in the characters of their nervous structure ;—these and the like inquiries do not presume, perhaps, too much on the immaterial nature of the soul. There would be nothing incompatible with our views in the hypothesis of the sentience of animals which had been deprived of the most necessary parts of their nervous system. That headless worms may still live and many other animals exist, in an equally mutilated condition, agrees with our hypothesis ; to which the existence of the *vegetable* kingdom would seem to offer a final support. For that plants, while they share in the *essential* characters of organisms ; and grow, therefore, and are nourished, and engender like them ; should yet remain as nerveless as crystals or as rocks, seems, and may, I believe, reasonably be taken to afford a wider proof, that nervous structure is not other than a brilliant invention on the part of animals ; contrived in the interest of the defence, security and development of their bodies.

280. To many it may no doubt appear impossible, that the organs which we observe in animals should have the origin which has been here proposed for them. It must seem difficult to believe that the sciences of optics and acoustics or of nervous physiology should have no other function than simply to reveal the manner in which a transient principle (sect. 262, 263) has been actualised in the animal body. As little, perhaps, will the psychologist be likely to believe that the structure of experience is in its

essence independent of the organs of sense. It may seem to him, too, impossible that the organs must have conformed themselves to a world pre-arranged and determined by *Reason* (sect. 67). That we see through the eye, and hear through the ear, and are otherwise sensible of Nature only through an organ ; and that the physiological sciences ascertain the very conditions of the soul's generation, and the real causes of her perceptions ; is a belief so deeply implanted in the mind that it can hardly be uprooted. And although some very serious difficulties must by all thinkers be held to attend this view, yet it must be naturally difficult to admit, what yet seems to be the truth—that organs can have no more for their function than to assist and maintain the body ; and that they do not *cause*, excite or in any other way produce our sensations of Nature.

281. We must, I believe, notwithstanding, affirm the body to be in all probability unable to sustain the part which is commonly assigned to it (sect. 276). What we have laid down may no doubt end in strange, although not, I believe, in impossible, consequences. But when we consider such conclusions as are arrived at from material and physiological principles, some appear more fitted to throw a doubt on the premises which conclude in them than to produce any conviction of their own truth. That an ether machine (for instance) or the MS. of a poet, or the design of a painter, is a spontaneous production of *Nature*—this, and similar conclusions which can scarcely be prevented from following from the supposed dependence of the soul upon *Nature*, must seem certainly very absurd and incredible. May we not with more reason believe that our senses have their root in our *souls* :—that impressions are first given to us (sect. 42) : that these then become the objects of will (sect. 76) : that thus we see, hear and become otherwise sensible of natural things (sect. 140) : and that then only are our sen-

sations brought into a relation, useful, although superficial (sect. 278), with the body (sect. 264) ? Here is, I own, something *unfamiliar*, but, I think, nothing absurd. There can be nothing more intelligible than that a *spiritual* activity should lie at the bottom of our knowledge of Nature (sect. 15, 16). If anyone thinks that organs are necessary to bring the mind into *communication* with Nature, there would seem little reason in his supposition. We look not to know a *psychical* being by means of stimuli and organs appropriated to that knowledge (sect. 11). What *logical* need, then, can there be for such organs to inform us of a *physical* one ?

282. I do not hold that we are therefore to deny that we are blind without the eye, and deaf without the ear ; and that without the other organs we have in general no sensation or impression. For our dependence on the body affords of itself no rigorous proof that it is by *reason* of the eye that we see, or of the ear that we hear, or of the other organs that we are sentient creatures. All this seems equally consistent with the idea, that our sensible experience is and must be naturally, if not indissolubly (sect. 262), brought into connexion with members of our body. Sir Walter Scott's story (sect. 277) seems to me to invite, nay, to authorise the belief, that material organs may be naturally *connected* with the action of mind without therefore being in any sense the *cause* of her action. For (the story concludes) the button being removed, so likewise was the use of the boy's faculties. Must it not be admitted that material principles, being used in this case at haphazard, might convince us that the real *cause* of the mind was an inanimate object ? And could anything be more plainly absurd ? Suppose this boy's case repeated in *all* the boys of the class, nay, in all animal beings. What more would be needed to prove on inductive principles the dependence of the mind on a material object ? Our attribution to our

body of the faculties of our mind seems to be founded upon little better reason.

283. If we could look completely into this opinion we might, however, find its influence to have arisen in us from deeper causes. That principle which has for its end the definition of *natural changes* (sect. 223) emerges among the first in the intelligence ; although instinctively and ignorantly (sect. 225-227). Its importance to the body gives it a character of exceptional interest. And when its law is perceived to extend over all material things, our minds, preoccupied with its interests, have tended to ascribe to it alone the title of *Reason*. Hence, it has followed that a single "scientific method" has been indifferently extended over the whole universe ; and that, in conformity with the needs of this method, the soul and her properties have themselves been considered to be as material as stone or timber. The erroneous conclusion—of considering the soul a spontaneous manifestation of *Nature*, has readily followed these suppositions ; and nothing has then seemed more reasonable than to determine the *cause* of the soul by the same methods as those that determine the causes of oxygen or water ; and to account for her changes, with those of molecular systems, in physical laboratories. If these conclusions cannot be gainsaid, as consequences of a Reason viewed so narrowly ; yet they cannot but lose their apparent force when a less preoccupied examination of Reason discovers that *many* principles jointly share a common authority under her. More than one scientific method must be acknowledged. And the division of labour which must thus ensue in the common task of these principles of explaining the universe ; —in giving to *some* of these principles the function of providing the essential matter of knowledge (cf. sect. 24, 127) ; to *others*, of moulding this matter into its rational form

(cf. sect. 68);—cannot fail, in according in turn to the *inductive principle* its own essential, although limited, task of determining Nature's definitions (sect. 92, 173, 183, 237), to render illusory the larger claims which this principle too often prefers:—to reduce other principles to *itself*; other objects to *matter*; and the soul to the *body*.

284. From what has been said, it will, I think, be evident that the soul and the body form no single existence. Soul and body are in fact things so completely distinct that no ingenuity can ever bring them wholly together. There may perhaps be no means by which a perpetual youth might animate any individual body (sect. 258). But it will not therefore follow that the soul also is corruptible. Though the soul be united to the body by a multitude of ties, she must remain in her *own nature* free from it (sect. 282). Whether the soul be mortal or immortal cannot be determined by experience. For experience indeed might succeed in following the soul into some *other* life. But how could experience penetrate into a time which must always surpass its finite reach (sect. 125) ?

285. Some view of the destiny of the soul it may, however, be possible to attain by the light of reason. For the reason of the soul is such that we may look through its means as easily into the future as at what lies at hand (sect. 67). This property of vision the first of all the soul's principles clearly possesses (sect. 24). For it was no momentary experience which was shewn, although in the flash of a moment (sect. 32), to the desiring soul; but one indefinite, endless, and reserving to her for ever all those felicities which might afterwards be revealed to her. A ray of light moving continually from the sun might seem to afford a physical image of the life of the soul. This principle, which thus seems to foretell the immortal nature of the soul; by also

disclosing the end and *purpose* of immortality ; completes the proof thus initiated by it. For from this principle flows, we conceive, the assurance that Nature, and all that has Being, has not for its purpose to destroy but to fulfil the soul (sect. 24, 127, 130). To this end all things exist ; and without it they could not have been known (sect. 16). That therefore which the soul knows itself to be in itself (sect. 24) cannot be by Nature in any degree thwarted. The soul must through Nature attain her satisfaction ; and not suffer, or come to harm, through it.

286. Such is, in a brief outline, what I conceive may most reasonably be said upon the subject of the *Change* of Nature. That Nature is animated ; that her changes spring, not from herself, but from the Spirit which imparts life and activity to her ; and that her endless variety is the expression at the same time of the Mind's and of Nature's own reason (sect. 246) ; this is what, following, so far as we might, the light of reason, we have ventured to maintain. If we have only a doubtful presentiment of these things, it must, I believe, be in some degree attributed to the blind nature of instinct ; which can furnish no clue to guide us through the labyrinth of those natural laws, themselves empirical (sect. 93, 224), which spirits must use and depend upon. Not even a juggler fails to employ a sort of instinct or habit (sect. 82, 257, 258). And if every kind of skill, like walking, writing, speaking and the like, may easily become automatic or mechanical, how might we expect to be conscious of powers which our ancestors of a thousand generations evolved for us—when these, I say, are so deeply ingrained in us, and those so painfully acquired ?

287. But if only we consider the phenomena of growth and evolution ; how, for example, the embryos of plant or

animal, when wrenched from their natural shape, renew it as a potter might renew a misshapen vessel ; how also even the more complex animals appear in the process of evolution ingeniously to form and to reform their bodies ;—when we consider this and innumerable facts of the like kind : and at the same time remember those different, yet perhaps germane, phenomena which psychologists have of late drawn attention to ; I mean, hypnotism, self-healing, stigmata, materialisations and the like ; the most of which would seem to disclose the influence which the soul has over the *body*, together with her possession of such faculties as are perhaps implied in or required for the body's maintenance and evolution ;—we shall, I think, admit that all these instances, while unintelligible upon a mechanical view of Nature, appear very well to agree with and imply such principles as we have supposed, however extraordinary these may seem at first sight to be.

288. With such a solution of the change of Nature as we are thus able to afford, we conclude our account of the *Natural World* ; which seems in all its extent to prove the progress of the soul's aim to attain her completeness. As we consider what the soul was in the beginning (sect. 24), and contrast with her original Object that which has sprung from it ; while we must no doubt at first have little expected so surprising a development, yet when we reflect further, how all hindrances which divide the soul from her Object must be broken down (sect. 126) or surmounted (sect. 166-287) ; we cannot, I think, fail clearly to see how the labour of the mind, in originating within her the *first* of the three meanings which her own nature imposes upon her (sect. 15, 16, 24), must completely transform the original appearance and aspect of things.

289. And thus the soul, directed by the impulse natural to her, left those Impressions which imperfectly fulfilled her desire (sect. 126); and rose by their means to the contemplation of an eternal, infinite Substance, outside of and not created by herself (sect. 148-176). Change having then made its appearance in this World (sect. 177); the soul was shown, by the help of motion (sect. 219), to conceive and to define the law of Nature (sect. 245). Of which law the soul herself appeared then as the unseen author (sect. 249). Lastly it was proved that the motions that determine the World's evolution could not be attributed to the soul's solitary activity (sect. 259). There was therefore assumed, with the original soul (sect. 28), the universal energy of *Spirits* (sect. 259); which, although they strike their roots thus deeply into Nature, are themselves not natural things; as being neither tangible, nor in any respect sensible, existences. What the soul's apprehension of a Spirit must be held, on our principles, to mean, we shall now endeavour to define more completely.

INTRODUCTION TO PART III

THE *a priori* DEFINITION OF SPIRIT

290. ALTHOUGH it might seem a superfluous task to inquire whether Spirits exist ; since little can seem more certain than the being of men around us, and especially of those whose bodies we can touch, see and hear : yet, because our apprehension of spiritual beings is no more immediate than that of natural objects, and every Spirit is in some sense of our own making (sect. 14) ; it must be equally necessary on our principles to show what motive there is in our *desire* to move our thoughts out of the Natural into a Spiritual World, as it was formerly required to bring them *there* from the world of our Impressions. As to the nature of this motive, following our general principle (sect. 124) we must attempt to find it by discovering : first, that some imperfection of *Being* lies in the soul's conception of Nature ; and in the next place that the idea of Spirit is devised to remove it.

291. Our aim must thus be in the first place to prove that *natural* things, by lacking some part of that existence which was supposed to be present in them, are in want of some supplement to bring them to perfection. And this defect, I believe, a little reflection will end in clearly discovering in them. A more minute inquiry into the essence of natural things shows that, although they partake, in their measure, of *Being*, what they are and what they are intended to be are not one and the same. It is a notion which must

be conceded that there belongs to the unconscious actuality of natural things a *substantial* or *self-determined* existence (sect. 127, 128); in which the soul herself plays no part; and to which her existence is by nature indifferent. Nature, I say, having once been *required* by the soul (sect. 124), is recognised by the soul to be wholly independent of herself. Of such a substantial kind are natural things *intended* to be. But, although their essence must claim such a pure independence; yet, because their existence as soul-less (sect. 128) must deprive them of all *self-illumination*, they must by nature be always as being-less to *themselves* as the soul must have been to herself in an eternal slumber. That *existence*, then, which a natural thing is desired to have lies less than wholly within itself. For it rests besides, to be what it *is*, on the soul; whose sense and knowledge of it (infinite and everlasting although it be) can be so little considered to be *accidents* of its being that their addition must be rather regarded as indispensable and wholly necessary supplements to its form of existence. What is intended, and what accomplished, by the soul, are thus different things. For the intention of the soul was to conceive a truly self-dependent being; but the accomplishment of the soul, to conceive such a being, only lamely and inconsistently. The case of natural things is this—that although self-dependent, they are only *imperfectly* self-dependent: to be what they *are*, there must be added to them a sense and a knowledge which they can neither contain in *themselves*, nor have consistently given to them by *another*.

292. The conception which the soul has of Being is thus after all only incompletely attained in a *natural* thing. This Object of the soul must accordingly, like the *first* of her objects (sect. 126), give place to another. The expectation must now be formed in the soul of the existence of an Object of an order higher than Nature:—an Object which being

hitherto unapprehended shall admit into, and include within, it that complete *substantiality* from the want of which a physical thing is inconsistent with the nature it is designed to fulfil.

293. That this superior Object may be apprehended, an inward *union* of the natural and the spiritual must be conceived by the soul. A thing no longer halt, wanting, and divided but whole, perfect and indissoluble—its being must hold the *condition* of the actual (sect. 34, 291) *within* it; must have this by nature as impressions have it;—this being, in short, must unite *mind* with itself, in virtue of its original essence. Such a being must have a character unknown to and higher than Nature's: and being no longer, as she is, insentient, but sentient; nor unconscious, but conscious; and in short completely substantive and independent, instead of incompletely so; must satisfy the soul in that particular which is necessary.

294. This Object being of such a kind implies its necessary possession of a *last* determining attribute: viz., that the infinite being of a physical thing (sect. 127) shall in this Object exist, in conformity with its determined attributes (sect. 293), not as infinite but as finite. For that principle which the soul now conceives as making one *essence* with the actual is by its nature incapable of giving existence to an *infinite* being (sect. 128). For including this in its *self* its faculty is unadapted (sect. 135). It follows that the actuality of a natural existence cannot be integrally received into this Object; but must split, and as it were, splinter in it, and break up into a myriad of fragments of a similar description to the soul's *impressions*.

295. Such may be called the *a priori* properties of this Object. They form together the essential idea of a *Spirit*.

For a Spirit exists outside the soul, as Nature itself does (sect. 128) : herein it shares Nature's character. And yet in being, as Nature can never be, alive, intelligent and active, it is superior in principle to anything which the eye can see or the hands handle.

296. The circumstance that such a thing as we are at present conceiving cannot give birth to so many impressions as to exclude all *addition* thereto (sect. 125) permits of our conception of *many* Spirits. For the impressions of a spiritual nature are of necessity finite (sect. 294), and therefore still *more* may at any time become actual in a Spirit (sect. 125). To conceive of any of these *unactualised* impressions as *actualised* in the universe is itself to conceive a *new* Spirit (sect. 294) : to whose impressions the same conception applying, a third Spirit may thereupon be conceived ; and then a fourth ; a fifth ; or any other number. The reason which enjoins the multiplicity of *spiritual* beings forbids all multiplicity to *Nature* ; since anything called natural being by definition (sect. 127) an actuality to which nothing can ever be added, there can be conceived no *second* natural being. *Space* is for this reason opposed to all repetition, and forbids our placing a second beside it. If *many* things do, after all, appear in Nature, it is from an *a posteriori* source that they arise (sect. 167). But the manifoldness of spirits originates in an *a priori* necessity.

297. The many spirits, in having those characters which were described in sect. 293, 294, must equally with the *original mind* (sect. 3) be endowed with desire, intellect and will (sect. 28) ; without which anything that *is* can be no more than a natural thing (sect. 127). A natural thing must be in its essence immutable (sect. 127) : but every *spirit* must grow and change. There can be no desire implanted in any

creature which is not of an Object at first unfulfilled (sect. 19). But beings moved by desire must be conceived able, by reason of the want of their natures (sect. 28), to acquire that *actuality* which is appropriate and necessary to their condition. Being attracted to all forms of existence, Spirits must be thought able, like the mind herself, to possess themselves at last of every intelligible thing. Of the several forms of existence the first or original must for them, as for the mind, be thought to be a train of *impressions* (sect. 21). Impressions of various kinds, arising then in the Spirit, must serve to produce in it its earliest emotions of satisfaction or dissatisfaction (sect. 40-64). Thus Spirits will be moved to form in the end those principles whose nature and results we described in sect. 75-120. No *a priori* thought can *deduce* all the forms of experience (sect. 42); but principles which may be known may *interpret* them (sect. 67). Accordingly, impressions different from any with which the *original soul* is acquainted may be supposed to be vehicles of the same principles in Spirits (sect. 61):—impressions may, as being of an indefinable and *a posteriori* origin, be of whatever variety in the Spiritual World, consistently with their final explanation by reason (sect. 67, 223).

298. That every spiritual essence must desire, conceive and have the sense of an *infinite* existence follows, in the next place, from that need of the actual which is universally implanted in Spirits (sect. 126). Such an acquaintance with a *Natural World* must accordingly be conceived in each Spirit as corresponds to that Spirit's impressions (sect. 144, 297): the Spirit least endowed with impressions will perceive least of Nature; a Spirit more amply endowed will perceive more. Such a Spirit as has received the most various impressions must possess the largest and most complex *knowledge* of the World (sect. 165); which, intricate as that

World may then be supposed to be, must, however, like any other be considered amenable to those various *principles* which have been already laid down as conducive to the explanation of the anomalies and inconsistencies of Nature (sect. 167-287).

299. The Spirit being as the original soul is herself must be expected to bear her likeness in all its features. And thus in the *last* place every Spirit; besides supporting impressions (sect. 297); and being in addition a natural reflector as it were of everything in heaven and earth (sect. 298); must in turn possess that expectation whose material or content we are at present developing. Desire for spiritual beings thus arising in Spirits; there must presently appear in the mirror of their conception the forms of living beings superior to any *natural* thing. And every Spirit which the soul has the power of reflecting a Spirit may, in turn, itself look to reflect. A Spirit must be thought to have, or to be able to possess, a common enjoyment with the soul as well in a spiritual as in a natural world; as in whatever else having a substantive or self-dependent existence it must agree with other Spirits in acknowledging.

300. When the soul finally, reviewing the whole content of this thought in a Spirit, considers what she must *herself* be in a Spirit's conception; she must conceive herself to be to that Spirit other than she is to herself; since being for herself a soul (sect. 3) she must be other to another than the soul. Seeing herself, then, mirrored like all other living existences in each spiritual life; and as no longer the recipient of actuality and good but as the giver of it; she must expect from her possession of a spiritual being what she can never have looked for from a *natural* thing; namely, to be the Object and satisfaction of another: a conception which, raising her above herself, must make her aware, like

the poet, of what every Spirit must in its turn discover when the worth of living beings has become evident to it :

Voi mi levate si ch' io son piu ch' io.

301. And thus, like Helena and Hermia, the Soul and Spirit,

seeming parted

But yet an union in partition, in virtue of their need of one another cleave and "grow together." When they are aware, from their intelligence of each other, that the Being which they desired from the beginning, and could not discover in Nature, is indeed attained ; the truth at which they have arrived immediately conceives within them its own *satisfaction* (sect. 36, 130) ; which now warms and wholly fills them, and is the cause in them of pleasures which the coldness and remoteness from their essence of inferior Objects could not suffice to give to them. This affection is the affection of love. For the pleasure of love, being indeed the ever happy effect in Spirits of that *union* with Being which they came into existence to attain (sect. 130), yet first reveals its *true* nature in those alone who, having conceived a *communion* with beings sharing with them in their conceptions, know themselves to be then delighted beyond measure, and, as it were, enraptured with a new discovery concerning themselves at once and the true meaning of existence ; so that, not otherwise than as a man who in the midst of some absorption in an earthly object is aroused by the voice of his lover, their whole existence is renewed and uplifted, and runs over as it were into the object of their love. At first the soul is thus delighted with one love ; but love streaming then as it were from one to another ; and from another to a third ;—since the thought of the soul is practised upon that universal instrument which Nature makes (sect. 130), and is indifferent

to no part of Existence ;—at last it loves the whole with a love that then has no containing bound or limitation in it.

302. What satisfies the soul that Spirits *exist* may be found in a consideration of those conditions which were laid down in sect. 131-133 with respect to the existence of a Natural World. For the need of the soul, of which then being aware she could not restrain herself from seeing, handling and in every way annexing Nature to herself (sect. 132), now adds to the growing pages of her volume a *living* Nature (sect. 293). It is one thing and not two which the soul makes with a Spirit (sect. 301). And without the Spirit so profound a contradiction must exist in her nature that it must then be impossible for her to remain so much as *herself*. Such is the nature of the soul that the words of the Upanishad are true of her : “ It is not that thou lovest thy son because thou desirest him, but thou lovest thy son because thou desirest thine own soul.” That bond which secures the soul to Nature (sect. 130) secures her to Spirit not less but more closely. For the Spirit is more necessary to the soul than anything that can be apprehended in Nature (sect. 292) : it is, then, less easy to separate from her.

303. This faith, thus *necessarily* imposed by the soul on herself (sect. 16), could not however, suffice to reveal to her the *spontaneous* being of Spirits, unless it might also become (if I may call it so) a kind of pipe which Spirits using might themselves pipe to the soul. For although by the mere use of her proper activities the soul may possess the sense of the changes of an inactive, inanimate *Nature* (sect. 177) ; yet of the free life of *Spirits* ;—desiring, conceiving and acting without any dependence upon her own like propensities (sect. 293) ;—the soul must be ignorant ; until they themselves through the instrument of her faith have revealed their minds and state to her.

304. And thus the living forms of Nature which seem to be consequent on a spiritual industry (sect. 249) bear definite testimony to those energies which promoted, or prompted, their existence (sect. 259). The bodies and movements of all living creatures provide some evidence of the minds which contrived them. And it does not less clearly appear from these what those minds are than from a footprint in the sand what animal traced it. The very essence of the Spirit seems to show itself in the *human* body. Nor is any other material thing so full of spiritual meanings as this is. Man's body might, in consequence of the clear images which it seems to show, be likened to a mirror capable at pleasure of reflecting all the moods, thoughts, caprices, aims, and inclinations of Spirits.

305. An instrument able thus in some measure to communicate to the soul the insensible histories of Spirits may, notwithstanding, admit those who are confined to this means of acquaintance with Spirits to a very imperfect comprehension of the Spiritual World as it is in itself (sect. 253). And perhaps living beings are able to communicate themselves more immediately and directly one to another than they can do by means of their bodies. Spirit and soul compose with each other a psychical *unity* (sect. 302), and hence, like the soul when she unites thoughts of her own hitherto uncombined (sect. 37), they may have the power of uniting together their scattered experience, and of mingling with each other, like tributary streams, in a single current. Such a union might perfect that common enjoyment which Spirits possess of Nature, of other Spirits, and of whatever else has a self-dependent existence (sect. 299). And although the circumstance that Spirits form a "union in *partition*" (sect. 301) must preclude in their case the *singleness* of the soul's being ; yet from the mutual sympathy and connexion of the thoughts, acts and passions of spiritual creatures

one mind and being may as naturally result as from another's words a sudden confluence of living impulses. What is called telepathic influence may perhaps already show a first germ and seed of such an intercourse among minds ; the interchanges of experience which thence arise seeming to show that Spirits have some privilege of conveying their emotions, thoughts, and even their sensations into one another, if they be strongly moved thereto, and make no doubt of their power ; although their bodies be at a great distance.

306. It remains to consider what the *consequences* are to the *soul* of the definition of Spirit. Such consequences as were involved in the conception of *Nature* (sect. 134-142) must in the presence of a being so different be removed, and others, in correspondence with a *spiritual* notion, take their place. The infinite existence of Nature could not suffer transient *impressions* to reflect its amplitude (sect. 135). But *Spirits* suppose a different consequence ; and, being finite (sect. 294), must rather require and demand that that incommensurability which divides Impressions from the Natural World (sect. 137) should become symmetrical and commensurable ; that Impressions should refer to, mean, or signify their own *images* in *Spirits* (sect. 294) ;—should, in short, *symbolise* them (sect. 11) as reflections in a smooth and unruffled lake, the trees and flowers which show their likenesses in it.

307. There is no Spirit whose impressions being thus imaged within the soul's will not thereby be in its own fashion seen and heard and otherwise perceived by the soul. While Natural things become objects of a *natural* sense (sect. 139-141) ; Spiritual ones may be in their turn distinguished by a *spiritual* sense (sect. 32-36). A Spirit may be seen and heard and otherwise perceived by this sense ; although the independent and free agency of all spiritual

beings (sect. 303) must prevent the mind from following, without their own co-operation (sect. 304, 305), the constant changes of their nature.

308. Impressions being dependent upon that original principle by which alone they exist (sect. 34), it follows that that desire, understanding and will which *constitute* this principle must *also* appear in the reflection which reveals to the soul the impressions of Spirits. This principle accordingly, in now gaining a *meaning*, must complete the soul's sense of a Spirit : the soul must thus at last become *wholly* symbolical (sect. 11). This is a sense of another kind than those senses hitherto found in the soul ; since it perceives no longer the *actual*, but that whereby the actual exists and is maintained. Such a principle is at first as little symbolical as impressions are themselves (sect. 14) ; but, like them, with the increasing growth of the soul, it becomes significant. It is like the face which the original woman saw in the pool of the Garden ; at first "with unexperienced thought" not divining its *meaning* ; but after a time conceiving it to be the likeness of her real self (sect. 302).

309. Enough has been said to show that there is a knowledge of Spirit as there is of Nature (sect. 143) ; and that each of these forms of cognition is implied in its own Conception. The sense of physical existence springs from the use of the soul's *impressions* (sect. 138-141) ; and these perceive only in part its infinite nature (sect. 135). But *all* the powers of the soul are employed in the interests of spiritual knowledge ; and to this they also completely contribute. By such knowledge the soul perceives what is unlike and not to be identified with natural objects. A Spirit is not a thing, like a body, which can be handled or folded over : it cannot be seen, smelt, or heard ; but natural things must be the objects of these senses. Nature is material, but the Spirit

immaterial ; Nature extended, but the Spirit unextended. The Spirit cannot exist in space (sect. 264). Nor can a material causality be predicated of it (sect. 283). There is a flight of the mind upwards, and away from Nature. "Nature, poor step-dame" cannot satisfy the mind ; or detain her in a world which is " silent and wont to say nothing."

310. How the conception of *Spirit* arises has now been considered : it has also been shown why Spirits must exist ; and what knowledge may be acquired of them. Desire restlessly determines one kind of Being after another. As, through desire, Impressions first appeared to the mind ; then a Natural World : so, in the third place, a Spiritual World fulfils the mind's nature and purposes. A Spiritual World, accordingly, represents the third essential form of the mind's *Reason* (sect. 25) ; which, first appearing as an *a priori* law of existence, becomes then a measure or criterion of the truth or the falsehood of actual things (sect. 25).

PART III

THE SOUL AND SPIRIT

311. HAD Spirits played their natural part in the world, we must, when treating of our actual *experience* of them, have shown no more than their conformity with their definition. But since that Necessity or want of Reason which we have noted in other things has not therein spent its force, what we must speak of is not perfect Spirits, but wanting and defective ones.

312. The purposes of Reason can, indeed, be as little annulled in the case of a Spirit as in that of other forms of existence (sect. 40, 147). In the *Imagination* a refuge exists from spiritual, as from natural, defects ; and the understanding may, if it have the power, engender whatever images of perfect Spirits it will. The Spirit cannot be conceived without attaining to so much actuality as the mind may through the *Imagination* concede to it. And thus nothing can wholly separate Reason from its Object. The knowledge of a spiritual world which may thus be originated cannot be neglected by the soul ; for although the being of such a world may appear inferior, and be by the mind admitted only in dreams and visions to such a complete *independence* (sect. 303) of the soul as the knowledge of its being might seem to imply (sect. 147) ; yet it is not therefore wholly wanting in actuality. We look with pleasure on the mere reflection or shadow of a thing if it be beautiful. And so the mind, perceiving spiritual things in a kind of dream

(sect. 307, 308), may take such pleasure in them as it does in the livelier beings they seem to presage.

313. It appears, therefore, no wonder that as many extraordinary beings exist in the realms of romance as in the pages of history. The authors of these romantic figures illustrate the poet's words that—

Fable is Love's world, his home, his birthplace,
Delightedly dwells he 'mong fays and talismans
And spirits ; and delightedly believes
Divinities, being himself divine.

In this spirit Goethe, Balzac, and many others have become the creators of spiritual beings whose characters and dispositions may move our love or pity more than the lives of their authors. The imagination of Homer or Shakespeare reveals the inmost truth of the Spirit. Men learn first through such poets what it is to be a man, and, taught by the poetry of the fancy, perceive truths unknown to their waking lives. In such knowledge men weep with Andromache, and tremble with Macbeth, and suffer with Lear. The poet lays the Spirit as it were bare and naked to the inspection of others. And poetry itself is the expression of the nature of Spirit ; whether, as in the *lyric*, it becomes the natural vehicle of the living impulses of the Spirit ; or, in the *drama*, shows all the springs of its actions ; or, in the *epic*, manifests the life of States and Cities.

314. The Fine Arts themselves aim at nothing so much as expressing the imagination which men have of the *Spirit*. They use natural means in order to express spiritual ends ; and although the immaterial Spirit, in thus appearing, is in some measure disguised, it yet acquires by these means some touch with a more actual existence than belongs to the pure imagination. Nature is herself naturally and artlessly endued with spiritual meaning. Her objects form a medium for its expression not less eloquent, and more

certain, than language. And the artist in the use of them may, not less than the poet, display the utmost powers of his understanding. We need only recall to our minds how the *eternity* of Nature is the *Spirit's* completeness (sect. 130) ; how her *changes* form the true picture of the Spirit itself (sect. 179) ; and how her living *works* are the apparent proofs of the Spirit's activity (sect. 255) ; in order to perceive how eloquent all Nature is with spiritual meaning :— the eternity of hills and skies ; the noise of waves and winds, the onrush of tempests ; or the breathing body ; all recalling in their several ways the various powers and genius of Spirits.

315. But if the hills and streams and living bodies of Nature are thus powerful to recall the Spirit ; more clearly still will spiritual qualities be brought to view when Nature's various meaning is deliberately drawn out of her, and, *trained* and *disciplined* to this end, she is completely delivered of the spiritual significance with which she is pregnant. Thus to deliver the life of the Spirit is the work of the Arts :— as the *architect* shows when he reveals the nature of Spirit in buildings of stone more expressive of Spirit than the rising hills ; the *dancer* or *musician*, by such streams of motion or of sound as discover the soul's changing passions more surely than waves or brooks ; and the *painter* and *sculptor*, by the images of such bodies as are, perhaps, not visible except to the eye of the imagination.

316. The genius of Art consisting in thus delivering Nature, the natural objects or qualities expressive of the life of the Spirit must be themselves penetrated by the imagination of the artist ; who must accordingly provide that nothing be either superfluous or wanting in the expression, but that, like the words of a poetic sentence, all its parts may give meaning to, and gather meaning from, each other. It is perhaps no easy thing to extort more from the wealth of Nature than she herself artlessly offers (sect. 176). There

is a risk that colours, forms and sounds may be obtruded by an artist upon the senses, to the detriment of those spiritual meanings which he aims at presenting through their means. And the artist only muddles and confounds the imagination when he fails to bring into his mind, by a supreme, although hidden, exercise of his reason, the things which are the most naturally expressive of the Spirit ; whether in themselves, or as they bring whatever else into the mind by their associations with other things.

317. The practice of great artists would seem to show nothing more conducive to the object of thus aiding and delivering Nature than the bringing of her elements, at the time of their being thus artfully chosen, into a single community or whole (sect. 72) ; by which it is that works of art acquire their frequent association with the beautiful. For Beauty so unites the differences of things that they may be readily comprehended together and conveyed as easily into the mind as if they had been one and simple. There is no confusion even in a great diversity of sounds or colours, surfaces or motions when some dominating likeness has once consolidated them. And it is with all such elements as with a string or train of words ; which, being combined by a meaning, are more easily recalled than they could have been, had they been inconsequent. Hence every work of art implies some order or principle of arrangement, in accordance with its nature : the architect, for example, attending to the symmetry of parts ; the dancer and musician to the beat of accent ; the sculptor and painter to the geometry of lines or the harmony of colours. The structure of speech, and its sound, rhythm and rhyme, illustrate the similar devices of poets. One of the prerogatives of artists is to conceive and to create these beauties, although the great masters do not commonly make them their end. To these beauty seems rather to come as the sun does, unbidden, in their effort to make known what a Spirit is.

318. Portraiture perhaps expresses the essential genius of artists not less than ideal figures. Lysippus' Alexander or Leonardo's *Monna Lisa* represents for its creator, perhaps, no fancied, but an actual consummation of the Spirit (sect. 312). The eyes of artists have sometimes seen their *real Object*; and "so long as men can breathe or eyes can see" their recording arts have made it their aim to perpetuate its fugitive existence. And yet the artist is more apt, when representing real Spirits, to pass a sort of condemnation upon, than entirely to approve and delight in, them; as Raphael does in some degree upon Julius II, or Titian on Francis I. Comedy which more than tragedy is wont to represent real personages on the stage agrees with the fine arts in this particular. Tragedy refines the ideal Spirit: Comedy, rather, condemns and mocks at real men. Some of the figures of comedy deride the great, some the licentious, some the rich, of this world. Why Spirits seem thus to be condemned and, in comparison with the pure forms of the imagination, often appear defective and irrational, we must now endeavour to determine.

319. The *reason* of these imperfections we shall at present attempt to define with no more exactness than that from which there arose those defects in our Impressions and the Natural World which we have already examined (sect. 68, 177). There is an influence in Experience which seems opposed to our Reason (sect. 66). And Spirits, like other things, seem to wear a disguise of *Necessity*. Yet this too we may, from what has been elsewhere laid down (sect. 67), already expect—that this disguise is a mask which may in the end be removed from the features which it conceals.

320. Necessity is a nature which impairs each thing in its own special perfection. It has been seen that Impressions, in lacking the control of their rational cause, were

subject to *chance* (sect. 42). The objects of Nature, again, though in their essence immutable (sect. 127), became subject to *change* (sect. 177). The defect of Spirits must thus be expected to lie in their *imperfect desire* ; since desire is their principle (sect. 297) ; and nothing can be thought able to affect their *Reason*, except this (sect. 25).

321. And that the immaturity or want of desire can alone be imputed to Spirits seems to be shown by the fact that neither of those defects which have been mentioned as attending Impressions and the Natural World can be considered in the case of a Spirit as an occasion or cause of error. Impressions may be creatures of *chance* ; but their resultant absence or presence in a Spirit cannot impair the Spirit's rational *principle*.

Blind Thamyris and blind Mæonides, though ignorant of "vernal bloom or summer's rose," might yet excel their fellows. As little can *change* harm the Spirit ; whose very essence indeed is to be ever changeful and acquisitive ; and to be always gaining from a diversity of impressions and sensations, the emotions, thoughts and apprehensions which accompany these ; and, in a word, experience ; all which implies a Spirit's unceasing change.

322. The defect of other forms of existence impairs their own natures alone (sect. 321). But the Spirit can suffer no harm without in some measure affecting all other things. For that Desire which conditions the whole of existence cannot become imperfect without deforming and disfiguring every part of it. Like a true mirror the true Spirit reflects the universe in its real shape. But the defective Spirit disfigures all the objects which its thoughts may have formed in it. Some parts of its mirror may be blurred, and some, missing : all the real proportions of the world are travestied in various ways by various Spirits. It is perhaps impossible

to describe every kind of distortion which appears in these mirrors. But by those principles of Reason which spiritual errors transgress it may be possible in some measure to elucidate the nature of error. In the light of these principles, we shall attempt first to describe the *general* characters of error; and then to determine how the Spirits with which we are ourselves most familiar seem to share in and illustrate them.

323. Some desire all Spirits must have whatever the character of their error: since a nature altogether deprived of desire must (to exist at all) be a natural thing and not a Spirit (sect. 291). Hence the original *principle* of desire (sect. 24) must be supposed in the most imperfect Spirit; as well as what is implicated in, and inseparable from, this principle:—namely, some faculty of expectation (sect. 32, 33), perception (sect. 34), memory (sect. 35, 36) and imagination (sect. 40, 41). This principle being, however, impaired in the Spirit; and that desire which can alone make the soul living being sluggish and feeble in it; the Spirit must, in all that it is, be obscured and confused. Its state may resemble our own when some physical pain has removed from our mind every natural use of its reason.

324. The world of *Impressions* is itself incompletely open to such a Spirit. Even the *diversity* of impressions (sect. 48) depends on the activity of desire, which painfully acquires that experience (sect. 53): the infirmity of a Spirit may thus deprive it even of that being which springs from distinguishing the diverse *qualities* (sect. 63). The advance in discrimination which is observed in animals and in human beings lends colour to the supposition that Spirits so impotent may scarcely have the power to observe the least *difference*. And only as a Spirit gradually attains some notion of difference can it be thought capable of apprehending those characters of impressions which are used to form

the ideas of substances, and of species and genera.

325. Such a Spirit may be said, like Plato's cave dwellers, to see "nothing at all of what are now called realities." The better part of things is completely hidden from it ; while it might, if it could speak, reveal itself as the prey of ignorant and irrational opinions, concerning its own nature and that of existence.

326. There must, however, be supposed in the least rational Spirit "an instinct or tendency of the mind upwards" ; since that Reason which is alone free from pain an inconsequence (sect. 67) must influence the least active being. The highest things are approached from the lowest. And the revelation of a *Natural World* must be thought as necessary, in the progress of time, to the meanest intelligence as that of Deity is to the highest. The knowledge which the Spirit may thus be expected to attain does not, however, in its inception, involve that recognition which a *rational* Spirit must be thought to have of the *Natural World* (sect. 130). The progress of a Spirit may be compared to that of a man learning a language ;—the Spirit will begin slowly to attach a *meaning* to its impressions (sect. 9) ;—then, like a learner, it will forget it, and seem, once more, to understand nothing. When the Spirit's activity has been more firmly established, it will still be unconscious of the rational *motive* (sect. 126) of its activity. It will rise into the world, not knowing for what reason it does so. Its *fate*, and not its *will*, will seem to impel it (sect. 1). It will be like a man considering a faultless work of art, yet failing to understand what constitutes its perfection ; for so it will at first perceive the form and being of Nature without admiration or understanding.

327. The recognition by the Spirit, in the next place, of

its power to control the *motions* of things may be supposed to arouse more animated motives in it ; and it will begin, if our principles may be believed, to form a body of its own. Embodied Spirits may be to some extent studied as well by observation as by reason. These agree in discerning in the *maintenance and the development of the body* the incentive to the Spirit's future progress. The difficulty which exists of maintaining a living body in Nature (sect. 260), by forcing the attention of animals on Nature's hazardous *changes* (sect. 67), draws the animal mind into that life of sense and present perception (sect. 264) which is the chief characteristic of the Spirits we know. Hence that struggle among animals which is evident in Nature (sect. 261) ; and the concentration of all their powers and faculties in the living body.

328. Here is, indeed, what might be described as a kind of pit-fall in the path of the soul, which Reason has itself seemed to leave in its way. On the one hand Spirits are, in evolving the body, fulfilling the reason of Nature (sect. 249) ; they cannot therefore be accused of error in maintaining the body. On the other hand, their performance of this rational task must itself end in *one* Spirit's making one, and *another* another, body its Object (sect. 259) : an unusual division of interests must thus gain ground among Spirits ; private claims must now be formed and sustained by them ; and Nature, the natural possession of all (sect. 130), must become for the animal Spirit an arena of illogical and irrational passions.

329. The narrow thoughts and habits of animal souls which thus arise contribute to blur the conception which must, in the *last* place, be formed in them of the *Spirit* (sect. 326). Though love and affection are the Spirit's natural gifts to the soul (sect. 301) ; yet these pleasures,

moving the mind at first as little as the pleasures of Nature (sect. 326), can make no resistance to passions which spring of their own motion out of private interests (sect. 328). Spirits are instruments at once more dangerous and more useful than other things to the body. And for this reason opposed passions arise in the mind, which in man himself reach their highest development. *Hatred* first sows its fertile seed in him whose life's interests are injured or disdained by another : and with this there springs up a *love*, which is, in its bodily origin, equally defective. From the union of these general passions spring the policy and practical wisdom of primitive man. And by social institutions and forms of government men finally settle about them a spiritual environment as necessary to their bodily preservation and growth as sand is to the pine-tree, woman to man, or the left hand to the right. In the interest of their bodies, men form states and cities ; and set in motion those social activities which are recorded in primitive, and may be traced in our own, histories.

330. This general description cannot pretend to indicate more than the rough outlines of the errors to which Spirits are, or may be thought, subject. But those who reflect upon the defect of Spirits will, if I am not mistaken, discover some likeness, in the conception which we have traced of error, both to the nature of animals and to that of ourselves. For it seems impossible that any other cause than an imperfect *desire* should have the power of impairing the reason of a Spirit ; which being in error must therefore present some resemblance to the features we have briefly described.

331. In especial we may notice how much every animal mind has seemed to be confined to the care of its body, and to such objects as interest it (sect. 329). While the body must be allowed to be not the least of the soul's rational

Objects ; which she must with good reason ward and nurture, entertain and comfort ; yet animal souls have not escaped the evil which seems to threaten their care of it (sect. 328). The minds of animals, immersed in the immediate perceptions which determine *its* interests (sect. 264), are incapable, it seems, of freely sallying forth into the world. The *principles* which, as intelligences, they must employ, yet fail to serve the large ends of Reason (sect. 1) ; and, remaining undistinguished from that narrow experience within which they are irrationally confined, are unable to exert those powers which make the soul in its true nature "the spectator of all time and all existence." The body, like a burning-glass, has focussed the various energies of animals and even of men, as they grow, upon one point ; and diverted those energies from their natural path. Psychology has plainly shown how truly the minds of animals may be described as *instruments*, made, not for the enjoyment of Being, but for the requirements of the body : for whatever the animal mind thinks, feels, or does, the good of the body seems the mainspring and first principle of its actions.

332. *Empirical psychology* may be said to assume, and to derive its leading results from, this principle. It investigates the natural bond which seems to have united habit, sense, imagination, memory and all the powers of the mind with the well-being of the body ; and, drawing out the consequences of this connexion, has evolved a doctrine of the soul which is not perhaps untrue of the animal mind. When it treats of human dispositions, habits and affections it is of the animal nature that it commonly speaks. For there are few or none of the activities of men which do not seem to be swayed :—although blindly and instinctively (sect. 277) :—by the needs of the body. It is in *their* fulfilment that men commonly consider that the good must itself necessarily lie ; it is for these that they labour ; and,

although their realization is, of necessity, of brief duration, yet they seem superior to needs which raise their possessors beyond things that are corruptible. Hence Spinoza, when considering what the good is generally held by men to be, confines its forms to these three : Riches, Fame and Lust : objects whose instinctive pursuit the needs of the body explain, and make not less inevitable than other animal instincts. For Riches permit the body to live easily. Fame shelters it from the severe and doubtful struggle for existence (sect. 329). And by Lust it is propagated (sect. 256, 272). As of the use of the organs of sense (sect. 277), so of the use of these things, the instinctive, unconscious cause seems to lie in the body. The skilful pursuit of these objects, in calling out the resources of the intelligence, raises men above other animals. The intellectual principles, which are, in the inferior animals caught in the toils of perception (sect. 331), begin in men to be liberated. Language discovers the increasing attainment of minds which have acquired some command over imperceptible things. The arts and sciences themselves begin to be distinguished ; and men, at length becoming acquainted with all kinds and forms of Being, exhibit the full powers of the animal soul in using Nature like a servant ; Spirits, like slaves ; and God himself

As Us'fers do their bands.

333. The common opinions which men entertain respecting the nature of *evil* corroborate and complete these conclusions. For as Riches, Fame and Lust are the *good* things which they seek : so Poverty, Humility and Abstinence are the *evils* which they avoid. Philosophers have not been wanting to support the instinctive opinions of men. If the soul only "have the power of subduing states and nations," all, they have sometimes contended, will be well with it. The tenets of Thrasymachus and Nietzsche, and of others who

hold kindred opinions, only bring into the open the ideas which in secret dominate a great part of mankind ; the instinct of whom, in failing to distinguish that merit which, in the poet's vision, made Mary

umile ed alta piú che creatura,

has preferred to her place the Babylonian pride of the Tyrant : who "exalts his throne above the stars of God"; and considers himself "like the Most High."

334. These theses of philosophers having, however, this much truth in them—that they represent in no small degree one, and that the most instinctive, of the ideals of men ; it is necessary to look more closely into the real character of these notions ; and to see how, by forming within the mind an imperfect conception of life and of existence, they have resulted in making men, without their suspecting it, not only the adherents of a false philosophy, but of an imperfect way of life ; the truth and pleasure of which seem not to be comparable to those of the true Spirit whose aim and life in accordance with Reason we have made it our endeavour to explain.

335. In introducing this more particular description it seems proper, in the first place, to repeat that, so long as the good and evil of the world are measured by the ends of the body, Spirits must be incapable of thinking justly of the nature of *Being*. They must instinctively conceive the Universe only as promoting or as endangering their private interests (sect. 328) ; or as completely indifferent to, and without concern in, them. The greater part of the world must seem to them no more than accidental and external to a single incomplete and inconspicuous part of it ; and Nature and Spirits, without which the soul cannot be truly said to exist (sect. 131, 302), to be formed without

reason by some sport or whim of Fortune (sect. 1). For it must happen with respect to the natural and spiritual beings which such Spirits encounter, that some will by chance appear to be *favourable*, and some *unfavourable* to the body ; and the rest without any use or relevance to its purposes. And thus the *Being* of such Spirits will be determined by Chance : a fate which will also rule and disturb these Spirits' *affections*. For what any animal Spirit sees by chance *serving* its supposed good it will slavishly cherish and love ; while what opposes it, it will equally hate and avoid. As to the rest of things it will be as indifferent to them as an animal ; for the dull and passionless nature of men springs from the same root as their passions.

336. From so false a *conception* of Existence men pass into a world akin to it. For as the desires of men are, so are their wills ; and as their wills are, so is their world also (sect. 30). First their *imagination*, forming a perfect pattern of their desire (sect. 147, 313), creates the splendid images of *Lust* and *Wealth*. In some men these visions are more secret ; in others, more open ; and most so when some procreative artist has given scope to his fancies. For the universe, as human minds are apt to distort it (sect. 322), is nowhere to be more openly seen than in the Arts. And thus these form a natural mirror of the general mind. Rubens' fleshly bodies ; or the strains of Wagner's operas ;—these perfect those visions of pleasure which more ordinary men contrive. *Fame*, we supposed (sect. 332), makes a third with Lust and Riches, as an end of human longing. And equally with their rich fancies the genial images of Fame delight men's minds. The dreams of Joseph are the general lot of mankind. In the secret places of their fancy men perceive their fellows bowing down before them like stars and sheaves. And similar compositions, lifting their con-

trivers out of reach of the struggle of Nature (sect. 328), exist among men.

337. That men's common occupations tend to reproduce within the *real* universe a pattern or image of this world of their fancy, only the failure of their endeavours in some degree disguises. Imagination, like a pipe from which men can blow at their ease the bubbles of their ambitions, flatters their most airy hopes ; but they must use their rude *hands* in the rougher school-room of the world. They therefore rarely blow in it those glowing shapes which please their hours of dreaming. How earnestly however they contend for the same aims of lust and wealth in practice as in fancy those men show who fondly stand at the street corners awaiting the Cleopatras of their dreams ; or in offices amass the first sum-totals of the riches of Monte Cristo. In the niches of *Fame*, men no less seek to secure to their ambition, although it be at life's cost, a present immortality. For, some niche of *Fame* men ordinarily seek as earnestly as *Lust* and *Riches*. And they are few whose hearts incline to the words of the poet :

O fortunatos nimium, sua si bona norint,
Agricolas !

This one would grasp a kingly crown ; another, a peer's coronet ; a third, a mayor's red robe ; a fourth, the staff of a recruiting sergeant.

338. Such lives do not in the end profit those who pursue them. The shadow of death falls coldly on the highest fortunes, and the censure of the grave troubles the minds of the "princes of this world." Avarice, jealousy, anger and pride disappoint the pleasures of those who would be content in this life. Mind and Thing fit no longer ; and Chance and Fate overwhelm the reason and desire of souls which partner only a fragment of the World (sect. 335).

They laugh who observe the vain struggle of men against fate ; and the pessimism of the satirist and the gibes of comic poets mark the collision of the sensual mind with the universe.

339. Yet they think rather plausibly than truly who, observing these proclivities in mankind, become at once mockers and sceptics.

To be worst

Stands still in esperance, lives not in fear.

Comedy has itself, like tragedy, discerned that—

The lamentable change is from the best ;

The worst returns to laughter.

The most sceptical of men must acknowledge the development in human minds of principles other than sensual. And Reason, as well as experience, in anticipating, supports the conclusion of the satirist, that men “ are capable of good.”

340. At first sight, indeed, the desires of the animal nature might seem to be ineradicably fixed in it. Education more easily develops the animal, than the spiritual, nature of men : and even the inspiration of prophets has seemed powerless to change men’s characters. But to him who considers man’s nature more closely there will become apparent, in the continual disappointment of the carnal desires, the condition of their gradual decay. An incessant suffering must in the end arrest the most active and energetic desire. And the pains of this impulse cannot be found to outweigh the pleasures essential to it without destroying the first principle of its being. *See* sect. 28. Such a fate the tormented desire of the animal must itself in time encounter. And the universe which at last resolves every true longing (sect. 67), must then appear as a refuge from evils otherwise irremediable. When the supposed excellence

of life is failing, and its fruits seem more bitter than sweet, the soul, like a prodigal, must turn to its natural home. In man himself these movements would seem first to have made their appearance. For man alone among the creatures has discerned a universal good; and, having already been surprised by the very needs of his body into the rudiments of arts and sciences (sect. 332), has entertained new objects of ambition. Spiritual needs accumulate; one mind draws on another; until at last the multitude of men, moved by new motives, have begun to fashion a new environment (sect. 329); to re-construct the State; and, seeking still, to look for a "City in the heavens," of other and higher temper than their own society: peaceful; polite; not animal; not brutal.

341. It is by suffering that the *Animal* (sect. 332) becomes the *Man* (sect. 340); and by this same agency man himself may be supposed destined at last to exceed his present condition. Suffering unbinds the fetters which imprison his desires, and forces him before he has suspected it into the room and peace of the world. While men are as yet unaware of its intention they are being borne by its mysterious mercy towards those lasting and secure pleasures which their souls are in need of. We must perceive, I think, (were such an experience permitted us) every Spirit, when disfigured and deformed and overgrown by disproportioned desires, in consequence of the pains of its state, turning at length towards other ends; until, when all had at last been accomplished, it had attained that condition in which desire, uniting it with every part of existence (sect. 130, 301), had relieved it of those fears in which an imperfect idea of Being had of necessity involved it.

342. And thus Experience re-appears in this sphere of

existence, in turn, as subject to *Reason* (sect. 67). For although all things appear at first to be defaced and deformed by the work of *Necessity* (sect. 68) ; yet there is not any which by means of principles appropriate to its condition fails finally to drop the disguise which she has fastened on it (sect. 319). *Nature* is unsubstantial (sect. 291) ; and she can attain to a rational form only by submitting her *defects* to reason (sect. 179). But *Spirits*, being *conscious* of suffering, are, in consequence of the very unsettlement of their nature which thence ensues, impelled to rise into that state which, being in a natural harmony with things everywhere, at last brings them to the full height of their *Reason*. If *Spirits* must slowly attain a truth which *Nature* always enjoys, yet the disadvantage under which in this respect they labour, admits of the ultimate fulfilment by them of their own *Reason* ; reserves to their natures the unique privilege of *freedom* ; and opens to them that way to truth of which I shall now attempt to trace the final stages.

343. The divided affections which seem first to have appeared in human nature (sect. 340) lead to an end which finally separates the state of man from that of the *animals*. The invariable, although blind, purpose (sect. 335) which moves the *animal* is in man's case exchanged for a divided and inconsistent one. Man's mind resembles the two-headed Janus—looking *behind* at its sensual, and *before* at its spiritual, pleasures, it is in two opinions at once about the meaning of itself and of the world. Inconsistent desires meet and conflict in man's mind and one has not the power to overcome and extinguish another. The natural appetites are not immediately restrained ; but at first, like tares, grow up with those interests which are rising by their side in man's nature (sect. 340).

344. Men are themselves now in doubt as to what they

are ; and seem strangers to themselves. Their inconsistent impulses have made the meaning of “ *I* ” itself an enigma to them. Like the hero of Defoe when, speaking of his more serious thoughts, he says “ *I shook them off* ” ; at one time they give their name to the worse part of their natures ; but at another ascribe it, like Macbeth, to the better :—

I dare do all that may become a man,
Who dares do more is none.

This conflict which estranges the soul from herself is of a kind as alien to her true habit as is that defect which is its original cause (sect. 320). For that conflict which has broken out in her nature, having recalled her from her natural pursuit of *existence*, has led her thoughts to prey uncivilly on *herself* ; and has made her the battle ground of reflections which were meant to be pointed only at the inconsistencies of her own *objects*. Other contradictions have their seat in the nature of *Being* (sect. 66), but this inconsistency, in the supporting reason and essence of *Being* (sect. 24). The soul’s present condition is such, that the *principles* formed by her with a view to removing her contradiction differ from the consistent principles of a true *reason*, and themselves participate in that contradiction in which their own subject is involved (sect. 342). Such principles are not, like others, unchangeable and enduring ; and can persist only so long as that transient mind whose thought gave them existence (sect. 342). But by their discovery of their own error they fail not to develop the mind ;—they set the mind on its way, and raise it slowly through the *moral* world into the world of *Reason* (sect. 342).

345. Such principles as are thus formed with a view to settling the soul’s inward inconsistency arise out of her natural sentiment (sect. 344), that either the one or the other of those impulses which divide her must constitute her complete essence. One by the offer of *spiritual*, the other

by that of *sensual* freedom, aims at restoring her natural consistency. The first takes its root in those who, like Macbeth (sect. 344), attempt wholly to identify themselves with *spiritual* ends and desires. These illustrate the saying of St. Catherine—that “the instinct of the spirit is to rise directly to its perfection.” It is the necessary defect and abstractness of this principle (sect. 344) which, however, presently leads these Spirits, like Bunyan’s Pilgrim, into “a very miry slough”; in which “many fears and doubts and discouraging apprehensions” torment them; and, replacing in their minds the visions which they supposed about to appear to them, fill them instead with spiritual fears. For their instincts are still alert and active in them; but the *fruits* of these instincts, in their minds and lives, are altogether irreconcilable with the supposed *principle* of their lives. And thus they must admit the *existence* of those fruits at the same moment that they are compelled to refute their *necessity* (sect. 1). In consequence, self-reprobation and the torments of an excuseless conscience arise in such men. Their own upbraidings and remorseless self-accusations raise an impassable barrier between themselves and their desires. They long for what it is impossible for them to attain; and their attempted song becomes, like the lament of the poet’s nightingales,—

The voice of desire that haunts our dreams,
A throe of the heart.

346. The *sensual* principle which may by an opposite channel attempt to carry away the soul’s superfluity is principally active in those whose affections have remained more subject to the desires of the body; or who have sought to ease the injuries of their conscience by the refutation of its cause (sect. 345). It is a principle which, presently proved by experience to be without the essential *pro-*

erties of a principle (sect. 1), finally plunges them into a deeper than a Serbonian bog ; where they struggle in a greater hopelessness than do others in their Slough of Despond (sect. 345). For they bear on their shoulders an unremoved burden of just aspirations ; and these desires of the spirit their proclaimed impotence is as incapable of *refuting* as it must be of *acknowledging*. Thus anger at that good which resists their designs of a Sicilian ease is the occasion in them of more violent revolts than are endured by those whom a tormented conscience distracted (sect. 345) ; and the inviolable presence of virtue in their heart saddens it and bares it of all pleasures. The Justice which they spurn still finds a place in their hearts. And if, like protesting children, they kick against its pricks :—become at last

bloody,

Luxurious, avaricious, false, deceitful,

Sudden, malicious ;

they act in despite of their still importunate virtue ; which is secretly raising them where they think that they have no desire to go.

347. Those who are attracted by these principles rarely adhere in practice to either of them. A way lying between them is more congenial to men's natural sentiments. In the words :—“ I delight in the law of God after the inward man ; but I see another law in my members, warring against the law of my mind ; ” lie at once the expression and the measure of man's general condition. This principle no longer aims at the complete satisfaction of *Reason* ; it resigns the attempt to bring the soul's discord into a premature harmony (sect. 344) ; and repudiates that consistency which, in the case of the contradictory principles united within it, leads the soul into opposite depths of misfortune (sect. 345, 346). Men who embrace this opinion escape the extreme evils which

attend more consistent, though less rational, principles (sect. 344). For if “the law of men’s mind” may still commonly seem to disgrace them (sect. 345); yet the “law of their members” may make them the just *aspirants* of grace (sect. 346). They equally escape the troubles of the animal or sensual life; for the evils which they yet do (sect. 346) “it is no more they that do it, but sin that dwelleth in them” (sect. 345). The view of their condition which men thus end by adopting impels them at last actively to suppress that contradiction in them which they have come to recognise. They now turn upon what divides and enervates their natures. What they once cherished they now spurn (sect. 335). Their hatred follows what their love formerly pursued. And their instinctive impulses become as odious to them as their good become holy. Thus their own natures impel men to apply at length to *themselves* that remedy of error which *suffering* presents to them (sect. 341). *Self-sacrifice* becomes an object of their ardent, though painful, pursuit. They conceive a desire of *discipline* and *temperance*; and find a law in *duty*. These and the like conceptions reveal the growth of new desires, and of other instincts, in the soul. Such *moral* ideas continue to influence man’s original disposition. And it is the work of these ideas in the soul which gradually changes man’s character; reverses for him the primitive meaning of the words “good” and “evil” (sect. 333); and ends in designating the love of Wealth, Fame and Lust as the *vices*, and that of Poverty, Humility and Chastity as the *virtues*, of man.

348. Man has thus attained a new *Conception* of the significance of life and of existence (sect. 335). On the one hand he sees before him the true riches of the world; and is no longer indifferent to them: on the other, he has surprised the lusts of the body in their real nature, as able only “to

plough up the air, and sow in the wind." Thus Existence ceases to appear to man as it once did—good or evil as the cares of the body seem to determine ; but good as it " releases the soul from the chains of the body " ; and evil as it fastens the soul again to them.

349. This conception of existence leads men in turn (sect. 336) into a *world* akin to it. Light and darkness, and good and evil seem to divide this world ; and to make it an arena, and no final resting place of the soul. The *Imagination* first represents the struggle which distinguishes the unusual oppositions of this world. The images of lust and riches and fame which were at one time sovereign (sect. 336) are now checked by more sober fancies ; or, thrust down beneath the eye of the attention by opposite principles (sect. 347), appear freely only in dreams, or in waking visions such as Macbeth's ; or are, again, it may be, sometimes banished in truth by the operation of virtue ; as is evidenced by the serious and sweet imaginations of some men, and in particular of certain artists : as Handel, among musicians ; or Holbein and Dürer, among painters ; or Milton, among poets.

350. These fancies present, in the *second* place, an ideal image or picture of the *lives* which men choose, or desire, to lead (sect. 337) ; the various impulse of which, although in some measure obscured by convention and custom, yet follows the same general course ;—pursuing, yet eschewing, wealth ; following, and yet avoiding, temperance ; and uniting pride and humility in various proportions. The living features of men move a little beneath the common mask of convention. Men fail not to exhibit little peculiarities of dress, language, or manners :—the signs of prudery, immodesty, self-opinion, ambition, love of wealth and title ; or, on the other hand, of temperance,

self-discipline, and chastity ; or of the struggle between them. Men's incidental conversation often reveals their ruling passions. The favourite hints of *some* men are of their mistress or of their own abilities : the talk of *others* ends in proteids or mathematics : the perplexities and troubles of this life form the common theme of other men. Some are carried away in the end by the lusts which duty has ceased to restrain in them ; ambition runs away with the minds of others : or, on the other hand, the pains of sin and the disappointments of this world take hold of some men. The play of circumstances upon men's unsettled spirits often accentuates the natural diversities which may be found among men ; so that they appear at such times strange, bizarre, unnatural, and even irrational. Their very soul may sometimes seem to be impaired and divided. And then it may be seen how difficult to maintain together are its opposing principles (sect. 65, 347). A few there are, again, who having seemed to reach a place of greater security have turned their back on the common objects of ambition ; as they may illustrate who, like Fra Angelico or César Franck, have been content to mingle without observation among their fellows, in sobriety and quietness of mind.

351. Thus, though men still remain generally subject to the pains and sufferings of life (sect. 338, 344, 346), yet under the impulse of the law which is peculiar to them (sect. 342) they have raised, and are able to sustain, themselves above their primitive condition. Human beings who have raised themselves so far seem not unworthy of the praises of Miranda :

O wonder !

How many goodly creatures are there here !
How beauteous mankind is ! O brave new world
That has such people in 't !

The natures of such men promise the completer liberation of that power of the spirit which shall finally "open the eyes of the blind"; and imply the soul's unconditional fulfilment (sect. 340). It may be supposed that they who have first learnt, in virtue of this power, to perceive the world of true existence, will feel at first the puzzle of the wakening Titania :

" My Oberon, what visions I have seen! "

For, like Titania, such Spirits, remembering what they were, and now conceiving Being in its true nature, will perceive the things which they used to desire, as strange and monstrous shapes.

352. Such Spirits, being free, and in their own right minds, will be no longer "like the souls which we at present behold"; but will have finally shaken off that spell which still deludes animal souls with strange loves. Lust or riches or fame may perhaps still sometimes surprise them; but these temptations will appear to them—as her memories to Titania—like passing shadows; which, for a moment falling upon and darkening them, have yet no power to affect their natural brightness: such Spirits will not be corroded and injured by those penetrating stains which are the cause in others of imputations and self-accusations (sect. 344). Some will rise above these shadows, and being finally intent upon and absorbed in the spectacle of Being, will realize their proper definition (sect. 311).

353. And thus when anyone has seen, on the one hand, what his real Object is, and, on the other, what hinders his view of it, he will suffer a double change, and regain the real use of his reason. For because of the things in which he is absorbed, he will, in the first place, have lost the remembrance of "himself" (sect. 328): he will be ignorant of his

own interest as this is understood by the multitude ; and all his care will be with things animate and inanimate. Lust will charm him no longer ; and he will be indifferent to riches. He will not sit in the high places of his own estimation : for he will have, and can acquire, no ambition to excel his fellows, or to obtain any other ordinary reward which is coveted by men. His state will not be easily intelligible even to good men, and will seem foolishness to worldly ones—such are without the power to understand that madness such as his (for they will deem it this) is “the greatest of heaven’s blessings.” But since there can be nothing added to him who already has the whole—he will keep hold of what he has and let go the rest ; acknowledging and finding his satisfaction in words and things which to other men will appear marvellous ; as, “Whosoever will be great among you, let him be your minister,” or, “Love your enemies, bless them that curse you” ; or, “Ye have heard that it hath been said, An eye for an eye, and a tooth for a tooth. But I say unto you, That ye resist not evil ; but whosoever shall smite thee on thy right cheek, turn to him the other also.”

354. The soul which has attained this state will, in the second place, perceive the truth of Being itself. The eye of her Desire will be opened, and she will now see things as they are. For when, having closed her eyes on herself, she has opened them on the universe ; at the time that she herself disappears, all other things will appear to her :—they will seem to become large and lofty, and to be possessed of a significance not hitherto dreamed of : gazing before her, the soul will contemplate with delight the universal Reason of Being. The nature of this transformation is not easily intelligible ; but it may be supposed that if any creature were to have its eyes thus opened it would have realized that end which it exists to attain.

355. Thus the soul has reached a new *Conception* of Being ; the concordance of which with her real Self will remove from her the need to exchange it for any other (sect. 341, 342). This conception will supersede that of a Being divided against itself (sect. 348). This conception has no quarrel at all with any thing in the world. It is a conception rather which, everywhere requiring and soliciting the soul's love of Being, is contrived to produce within her those thoughts of Nature and of Spirit which we have endeavoured to describe. It is a conception, finally, which, raising the soul in turn above these things, will end in showing her the Final Object of her desire, "in the contemplation and knowledge of which she will repose."

356. The *consequences* of this conception (which it remains to consider) may be gathered from the imaginations and the lives of those persons who have been generally allowed to be the teachers and prophets of men. The *imagination* of these Spirits, being opened to the nature of things, frames in the first place the most suitable images for the interpretation of the error and defect of mankind (sect. 318). Thus have in turn been introduced by them into the world those more positive truths which are the measures and criteria of error (sect. 310). The solemn glories of the Gothic builder; the religious sounds of Bach; the mystic forms of Leonardo : these, and the works of some other artists, and of poets who, like Dante, have beheld "that heaven which most receives of the All-Mover's light"; have shown, I conceive, not a little of the true nature of the soul and of the world.

357. Philosophy may be associated with these arts, in its attempt to determine and to bring into the light the principles which move and direct them. Artists arrive at

their conclusions by a kind of inspiration :—the philosopher, rather, is aware of those *principles* which, unknown to the artist, yet fill the springs of his thought. When a principle has appeared in any philosophic nature, as Number in Pythagoras, the Ideas in Plato, or the Categories in Kant ; and has been recognised to *require* one form of existence and to *reject* its contrary (sect. 1) ; experience itself becomes in its turn the object of an independent inquiry ; until principle and experience are re-united in the thought of the philosopher : to constitute for him a Being no longer subject to doubt, or opinion, but necessary, inevitable, and superior to chance.

358. The philosopher, therefore, having distinguished principles, and opposed them to experience, and united them again with it, aims at reaching that kind of knowledge of the universe without which, although a mind be inspired, it cannot be wholly master of itself. Such studies have, even in their imperfection, a very great value : “Theology and philosophy,” says Berkeley, “gently unbind the ligaments that chain the soul down to the earth, and assist her flight towards the sovereign good.” The highest presentations of philosophy have thus a worth for the soul like that of painting, music and poetry (sect. 356).

359. It remains, finally, to speak of men whose natures, being akin to those conceived by Leonardo in *St. Anne*, or by Dante in *Piccarda*, or in his *Philosopher* by Plato, have in their lives made real these visions of philosophy and of art. So much of the World seems to have been revealed to their spirit (sect. 322), that to judge of the lives of these men may be itself considered a gift in man. Love, which unites others to scattered and random objects, holds these fast to all things, and makes evident to them the fulfilment in these things of their own being. Love unites them with the objects of *Nature* (sect. 130) : it has been said of St. Francis

that "he never forgot to take pleasure in a bird as it flashed past him, or a drop of water as it fell from his finger." Love makes them active to awake in other *Spirits* those desires whose absence once disturbed their own reason (sect. 301): it sends them wandering, for others' gain, by land and sea; showering, through them, "benignity upon the world." Love unites them with the *Supreme Good*; and here, reposing, they complete their intercourse with love. Love, lastly, proportions all things for *themselves*. The promise that "all these things shall be added unto you" is peculiar to these. Like children confident in the possession of those bodily advantages which are necessary for them, these Spirits repossess life's "first fine careless rapture." Not mirthless, nor perhaps without a garland, they will enjoy "the neat repast"

Of Attic taste, with wine;
and will neither seem to themselves, nor be counted by others, unwise.

360. That the soul *desires* the Spirit; that the Spirit exists; and that she is an object of knowledge, has now been shown. We have seen, also, that the Spirit is subject to Necessity (sect. 66); and finally, that she must in time be released from its influence. We have thus considered the *second* of those meanings (sect. 11) which it is the nature of the soul to impose on herself (sect. 16). It only remains to determine more completely the nature of her *third* and *last* meaning (sect. 10, 355); to show the soul's desire as well for a Supreme Being as for other forms of Existence; and then to prove, so far as we may, its actuality and the nature of the knowledge we have of it. To these considerations we now proceed; and they will form the subject of the concluding part of the Essay.

PART IV

THE SOUL AND GOD

361. It has been generally supposed that the intellect is incapable of knowing God. And certainly, so long as the mind is engaged, and wholly occupied, with reasonings relevant, and only appropriate, to *natural* objects (sect. 283), there can hardly exist in the soul the means of arriving at anything further. That principle of Reason which we have adopted in this Essay, does, however, conduct us beyond natural things into a *spiritual* sphere (sect. 309), and shows a necessary tendency and movement of the mind upwards towards some supreme and final form of Existence. Our principles permit us to set aside such arguments as have their root in the *Natural World*; and, still continuing to draw our thoughts from the unexhausted and free spring of the *Mind*, to consider what inducement our Desire may afford us to evolve yet another system of knowledge. What this may be we shall try to determine by setting forth (in accordance with the general method of our argument) first, under what defect of Being *Spirits* must be thought to labour; and secondly, what that is which fulfils their want.

362. And it seems that, as the present Object is of every mode of Existence the most truly necessary to the soul; so the step leading up to it is the most evidently placed in our sight. For it is manifest from the principles we have already laid down that the spiritual nature is in this circumstance unequal to that *intention* of existence which the mind formed in conceiving the Spirit:—

namely, that, although it realises in a degree higher than any natural thing might do that *self-subsistent* being which was implied in the soul's primitive thought (sect. 293), yet it fails to combine with that substantive being a complete *actuality* (sect. 294). And thus it is that there is something which, although fulfilled in a natural thing, is in a *Spirit*, by reason of the nature which it was conceived to be, let go and abandoned.

363. Thus Being, like the unfinished draft of an artist, still appears to have been only roughly drawn in the mind, and to be capable of a still higher excellence. To this, therefore, the soul ; in virtue of the principle which has been laid down for her (sect. 124)—that her need of Being is the true measure of existence ; will now wholly turn herself. *Desire* it is which moves her ; and which must at present become a motive to cause her to push her way further still into things ; until, in the conception of a perfect existence, that is discovered which must be sought in vain in forms which are in any respect defective.

364. Nor will that way, I think, seem doubtful when, retaining in our thoughts those characters in which Spirits excel *Nature* (sect. 293), we make their defect that amends which is required by their failure to attain *Nature's* perfection (sect. 294). A *Mind* sustaining the *Infinite* as Spirits sustain the *finite* (sect. 34, 294) ; a Being conscious, accordingly,—living, *self-subsistent* and *substantial* : and yet at the same time imparting these necessary properties of existence to an *actuality* no longer transitory, changeful, and in its essence imperfect (sect. 127), but one perfect, infinite and eternal :—such a notion, having been entertained, must supersede all former modes of thinking :

Something rare

Even then will rush to knowledge ;

and there will appear before the soul a new Nature : the completion and head of the body of Existence : a Spirit which, desiring, conceiving and willing, yet in virtue of the Object which it upholds is also, in the language of St. Augustine, “ever the same, eternal, sempiternal, immortal, and unchangeable.” (sect. 127).

365. Such is the general nature of the conception which the intuition of the Spirit must attain of *God* ; who, having been conceived as a last harmony, combining within itself all the necessary strains of Being ; like a chord which has been gradually built up, at length fulfils the desire of the soul. For no desire can exceed this desire, since that can be neither surpassed nor equalled which, including within itself without defect the virtue of all other kinds of existence, can allow no greater Actuality to be thought or hoped for.

366. The measure which determines the place of the soul in existence has thus been wholly unwound. To those whose affections fall short of the Supreme Object must be assigned a place among those inferior Objects which their desires award them (sect. 335). But he who is dissatisfied with a good which is still incomplete must be granted to fulfil his desire in that

che non si lascia vincere a disio.

The least of human minds is moved by some conception of a Natural World. But it is the right of rational beings to live in a Super-natural (sect. 283). Ordinary men may be thought to be in that relation to Nature which perfect Spirits are in to the Supreme Being. And if to the *former* it seem something extraordinary that souls might exist without any concern for Nature (sect. 326), so it must seem equally strange to the *latter*, that Spirits should live without any for Deity. The one is as much unable as the other to

refrain from opening the sense of his soul to the Object which moves him (sect. 13, 15, 140). Such is the sentence and reward of the different natures of Spirits.—When desire has raised any Spirit to the final height of Existence he will be scarcely able to turn back to another. The saying of Molinos will be understood by him : “ He that hath God hath all things, but he that hath Him not hath nothing.” He will be one whose former knowledge will perfect that love which is now finally bursting from him (sect. 301). For he will perceive every other form of Existence as only brightening and deepening the perfections of this one (sect. 130, 292). And all other things will seem, at the point which he has now attained, to have for their final end only to prick and augment his natural love for this Supreme Being. For all other things are, in comparison with it, shadows and reflections ; and by their presence in the soul animate her desire, as “ no ” animates “ yes ” (sect. 53, 67), or the deformed, the desire of beauty (sect. 167), or evil, the excellence of good. He therefore who has been led on from one form of Being to another ; having all things in his mind, and seeing in all the purpose of one love ; has reached that comprehension of Being which is his natural end.

367. That the proof of the divine *existence* lies in the nature of a soul thus perfected, will, I believe, be clear from what has already been premised respecting the ground of other forms of Existence (sect. 28, 132, 302). The cause of our knowledge lies in the *soul* (sect. 16). Things appear to the Mind in virtue of her nature’s own impulse ; and without this impulse nothing could be conceived, nothing be necessary to the mind. An inert Spirit could not perceive even a natural, not to mention a spiritual, being (sect. 326). And a mind indifferent to the Divine Existence (sect. 335) must require some demonstration of His reality other than exists

in herself. But desire directed towards a self-subsistent and infinite Nature at once conceives an irresistible need of Him ; and, uniting her Self with her Essence, then remains for ever assured of His Being.

368. The existence which is required of inferior beings cannot be other than required of that which includes them (sect. 365). For that need of the Actual which, having given to each thing successively a place in the world, has removed from each one in turn the appearance of being an accidental and strange pendant of Existence ; in one only *necessary* Thing concentrates at last all the momentum and strength which can attend conviction. For in all other things the will finds something still to clog the easy motion of its wheel (sect. 125, 291, 362) ; but to this it is borne onwards with an unabated and smooth motion (sect. 365).

369. A Spirit's conviction of God might be compared to a pipe into which He breathes for its sake a confirmative strain of His own. Scepticism wants that *recognition* of His existence which is the indispensable condition of His self-revelation ; but faith is an instrument through which He may Himself be conceived to confirm His existence. Two channels of communication may, in the case of the Infinite, as in that of the Finite, Spirit, be supposed (sect. 304, 305) —Reason may conceive God to appear in a mediate or an immediate form. Whether God ever appeared for a while to mankind in a mediate or *bodily* form, Reason unconfirmed by experience cannot plainly determine (sect. 297). The incarnation of God would seem, however, no more mysterious than that of a Spirit (sect. 258). Men are incredulous of wonders to which their desires are indifferent. And an intercourse with a Supreme Being so familiar as that supposed may seem a thing difficult enough to the probabilities of men. But it may be a sign of a shallow and timid, rather

than of a prudent, mind to doubt a union, however unceremonious, of God with his creatures.

370. Some have perhaps experienced an *immediate communion* with the divine Being ; although their want of power to impart their experience to other men has confined what they may have known to themselves. Of Plotinus, for example, Porphyry says in his *Vita Plotini* : “ He was vigilant and pure of soul, and always striving towards the Divine, which with all his soul he loved . . . And thus it happened to this extraordinary man, constantly lifting himself up towards the first and transcendent God, that there actually came a vision of that God who is without shape or form, established above the understanding and all the intelligible world . . . And he attained that goal four times, I think, while I was living with him—not potentially but in actuality, though an actuality which surpasses speech.” (Trans. Murray).

371. And thus Desire has reached its goal ; and, fulfilling its original impulse (sect. 18, 24), has added to the rest of Existence an Infinite Spirit ; the top and climax of the world, and of its Self. Of the final consequences of this Object to the mind *itself* we must now briefly speak in conclusion.

372. As an imprint cannot be formed in the mind of an infinite space (sect. 151, 156), although part be incessantly added to part ; nor of the eternity of a thing (sect. 135), although sensation be added without end to sensation : so the symbols of *desire*, *intellect* and *will*, by which the attributes of a spirit are apprehended (sect. 308), cannot receive the complete shape of an Infinite Spirit (sect. 10) ; though stretched to the utmost. Of the being of God no more perfect symbols can be formed by the soul than of the being

of Nature (sect. 137) : the images which may be drawn from the mind are not of His essence (sect. 364) ; and although raised above their natural height must constantly disfigure His real nature. Of *other* symbols, also, the being of God can admit as little as Nature's (sect. 135). For neither has the soul any higher supplementary power of her own : nor can a new faculty, arising within her from His *other* existence, match her apprehension with God's, and make her of one nature with Him.

373. Yet not to dull the mind, but to confirm her *Reason*, has this inability been fixed in the soul. For to be thus exceeded is the soul's natural aim ; and to realise that aim is her ultimate Reason (sect. 365). A knowledge, consistent with, and involved in, this desired ignorance, consummates the Reason of the soul in making her finite nature itself her means of attaining that comprehension of God which is proper for her. This knowledge of the soul is no less necessary than her ignorance. For the principle of the Divine existence is, to be the *consummation* of the principle of *spiritual* existence (sect. 364). And thus the nature of the Spirit must be apprehended in that Conclusion which has in a Supreme Being been conceived for the Spirit. Of necessity, therefore, desire, intelligence, and will (sect. 24, 28) ;—though now remitting something of their finite ingenuousness and imperfection, and intimating that in which they are made whole (sect. 371) ;—must fall into a relation with a Divine pattern or exemplar answering theirs. All may be said to be once more represented in that image which might also be used for the interpretation of the Natural World (sect. 136) :—the Trinity of powers which forms the Spirit does not less truly reveal the nature of God than the reflection in a moving stream, a substance which repeats itself in it.

374. Such reflections may be disturbed by the stream's hurrying course. And yet the eye which is prevented from seeing the substance reflected therein is not altogether hindered from divining the undisfigured and motionless form of that substance. And thus the desire of the soul divines what surpasses desire ; and the intelligence of the soul divines what surpasses intelligence ; and the will of the soul divines what surpasses the will. By such imperfect images the soul is able to determine the nature of the Divine Being, as it is for herself and must be known to be by her.

375. The mind made use of this power when apprehending the infinite existence of *Nature*. For perceiving an object of Nature (sect. 127) only by the medium of faculties which disturbed the natural constancy of that object (sect. 135), she notwithstanding perceived it, by the means of those diverse faculties (sect. 139-141), to be one, simple, and uniform (sect. 137). And when the mind, also, being confined in the boundaries of space, used for her symbols of an existence one and formless many diverse forms, she artfully exceeded those finite images ; and by their aid arrived at a knowledge of a thing essentially and naturally surpassing them (sect. 156).

376. And thus, to the intelligence which uses the last and best of its powers, the Divine Existence does not less truly appear than the being of Nature or Spirit (sect. 10). Although the Divine essence be in itself such that no psychologist can write a book about it, or any interpret it as it is for Itself, yet to the eye of the soul there must appear, imprinted upon Its boundlessness, like outlines defining the endlessness of space, the finite figure of her own proper nature. *Desire* and *intelligence* must there appear to the soul ; and—raising that desire to love and that intelligence to knowledge—the form of her *will*.

Nel suo profondo vidi che s'interna,
legato con amore in un volume,
cio che per l'universo si squaderna ;
sustanzia ed accidenti, e lor costume,
quasi conflati insieme per tal modo,
che cio ch' io dico e un semplice lume.

(*Paradiso*, 33, vv 85-90).

377. The final step of *knowledge* has thus been ascended, and a Being appeared of a nature unlike that of anything else. First, a *physical* sense opens to things the eye of the soul (sect. 139-141); this is succeeded by a *spiritual* sense (sect. 306-308); and this then leads to a *divine*. Each lower sense leads to a sense above it. And the highest connects the soul with the Deity; as the intermediate with the being of Spirits; and the lowest with the objects of Nature.

378. Such is the conception which the soul has of God: a conception which is, like others, engendered in desire and actualised by the will that makes that impulse active. Like a seeker passing from the counterfeits to the reality of an object lost by him, the seeking soul only stays her search in a Being wholly conformed to her nature. The Reason of the soul, which penetrates more and more deeply into existence, here assumes an unchangeable shape; and, having attained her end, ceases to look for anything further (sect. 25).

379. It remains only to conclude whether *Necessity* (sect. 66) can be conceived to alter this nature in God; and to qualify or change the convictions which the soul must hold with respect to Him. It has been shown that *Necessity* can affect the inferior Objects of the soul. It was the source,

in the first place, of chance in *Impressions* (sect. 68). It appeared next in the change of the *Natural World* (sect. 177); and afterwards in the indifference and perverted desire of *Spirits* (sect. 319). It may thus be thought able to alter and affect even the Supreme Existence.

380. And this indeed some men have not been slow to assert. For seeing very evident defects in Nature and in Spirit, they have imputed these errors to the inadvertence or the weakness of God. Thus, when they look at Nature, they see many evils. "Monsters, untimely births, fruits blasted in the blossom, rains falling in desert places"—these and the like are, in their view "so many arguments that the whole frame of Nature is not immediately actuated and superintended by a Spirit of infinite wisdom and goodness."

381. Much more when they consider the life of man, they are tempted to refer its miseries and manifold evils to a source in One to whom "all things are possible." "God," they complain, "hath delivered me to the ungodly, and turned me over into the hands of the wicked. I was at ease, but he hath broken me asunder; he hath also taken me by my neck, and shaken me to pieces, and set me up for his mark."

382. We must, therefore, attempt, in conclusion, to consider the *nature* of this Error or Necessity; and to determine, if possible, whether Reason may be thought in the end to control it, or whether every form of existence must be equally subject to its power. This may be observed in the first place: that what is by nature other than God must be *essentially* defective. For it has been said truly that "the good which is the object of the will is Therein wholly gathered, and outside It that same thing is defective which Therein is perfect" (sect. 126, 292, 363, 365). Thus what deviates from the Divine perfection, having of necessity

fallen short of perfection, cannot attain to perfection by any conformity with its own peculiar and proper *ideal*. It may, therefore, follow that some deviation from its own *a priori* or *natural* form may occur in any defective nature, without its departing, on that account, any further from that Perfection of which its nature necessarily falls short.

383. In order to demonstrate this conclusion, we need only look into the nature of Reason itself (sect. 1). For the divine principle, being the only true Reason (sect. 378), can alone possess the complete *nature* of Reason: hence it alone can claim the full power to *require*, or make *necessary*, the Object of its conception (sect. 1). The *inferior* principles of Reason,—of Impressions, Nature and Spirits—being imperfectly rational, can only imperfectly require their Objects' fulfilment. It is therefore permissible that these Objects should assume *a posteriori* or undeducible forms (sect. 66). Error thus derived is, therefore, no refutation of Reason itself, but in accord with Reason's own nature (sect. 1). Such defects may be productive in the end of results which Reason can *herself* employ to the soul's ultimate profit (sect. 67). For so long as all continued to be well with the world, the soul's own reason and pleasure would indeed be perfect in each thing: but when the *errors* of Being, disturbing the soul's natural course, have excited and animated her desire (sect. 67), the ensuing discovery in the world's defective Objects of the Reason which had seemed to be lost to them gives to the soul a far more lively apprehension and joy than could have been otherwise possible to her (sect. 109). Such may, I think, be considered the true nature of Necessity. And the proofs of it seem as many as the imperfections of Being themselves. For it is to the rational *licence* of things that the mind owes the pleasing diversity of impressions (sect. 72): the joy of colour, and harmony of sound; beauty; and those other intellectual

pleasures which have been mentioned as belonging to the world of Impressions (sect. 75, 109). Nor is the Necessity of *Nature* less apt to add to the desires and natural delights of the mind new grounds of pleasure. For change which might seem at first to defeat all the intentions of Reason (sect. 178), yet in the end seems so well to fulfil them that the joy of the mind is nowhere more evident than in the law and life of Nature. So that there is, I suppose, no one who would prefer an immutable, unchanging World to a mutable and changeful one.

384. To look also for a reward of a sort to
redeem all sorrows
That ever we have felt

may, even in the light of these pleasures, seem illusory. But it may not be so. "Those who weep" (sect. 341) have commonly approved that travail of the soul which has, in its turn, an ending in Reason (sect. 342). The pains of the soul are the means of stirring such a desire for and delight in *Existence* as must add a crowning perfection both to the mind and the world. Without the troubles of life the enthusiasm of a Plato or the energy of a St. Francis (sect. 359) might never have moved the Spirit. The sufferings of the spirit are like those of a lover ; whose love of his mistress remains in the end the most full of passionate delight when he has been most artfully delayed in a long pursuit of her.

385. Thus the nature of Necessity, when largely considered, seems to be founded in the nature of Reason itself. Its presence in Objects which Reason was not formed to make wholly necessary results only in extending Reason's authority. The Objects which Necessity affects are not subject even at their height to the whole law of the Mind.

They may thus be distinguished by an excellence which imperfectly rational conceptions of Being could not require, or look for, in them.

386. But this rational licence does not qualify and affect all things ; and what admits these conclusions with respect to an imperfect existence as decidedly forbids them of a perfect one. The nature of the *perfect* Reason is to maintain, as of the imperfect to relax, the claims of Reason (sect. 383). Therefore that Being which the perfect Reason *requires*—that *cannot* be thought to swerve from its appointed nature (sect. 1). Nor—were this Being conceived able to suffer—could it acquire, like other things, a more evident virtue. For if anything which is in its essence defective may, by the addition of new qualities, still more freely fulfil the soul's rational desire of it ; what is by nature perfect cannot by any alteration but decline from its essential perfection. For of the imperfect grade and degree are possible ; but not of the perfect. What, then, lets Necessity, not without advantage, loose on the creature, keeps it remote from the Creator (sect. 365). From the vicissitudes attending defective existences the Indefectible must of necessity be free. And thus there is no power or principle or reason which can wrest the essential Being from its own shape ; but as respecting it the soul must be satisfied, and without any apprehension.

387. The certainty of the perfection of God must make it unnecessary to seek in Him for such *relief* from defect as the sciences afford to the Natural World or the pursuit of good, to Spirits. The Reason of the soul is here perfected ; nor can the soul seek in any way to renew or alter the principle of the Divine nature.

388. The account of God which our principles required has thus been completed. We have determined how the soul must conceive, and satisfy itself of, His existence. We have shown, also, what knowledge may be attained of His nature. Lastly, we have seen that Necessity cannot alter His being, nor Reason discover another virtue in it.

389. From what has now been said it will be evident that the task we proposed (sect. 8) is completed. We have *assumed* the desire of the soul ; and have thence, so far as we could, deduced or interpreted all our *experience* (sect. 2, 3). Human speculation is, certainly, not without its doubts and discouragements. Yet he, I think, judged truly who said, that “there is no subject so obscure but we may discern some glimpse of truth by long poring on it.” To raise our mind by thought out of her original state (sect. 1) : to realize her natural power (sect. 3, 6) : and, laying aside all weakness and scepticism (sect. 5), to recognise her real nature is, I conceive, well worth the attempting. Truth is the only safety of the soul. And while her mere pursuit must promote the mind’s health and well-being, her actual attainment will remove the burden of our existence ; restore and reanimate our life ; and satisfy us as well here as hereafter. We ought therefore to raise up our minds ; to foster, to the best of our ability,

that blessed mood,

In which the burden of the mystery
Of all this unintelligible world
Is lightened :

that so we may attain that peace which it is our destiny to cherish and enjoy always.

THE END



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their conclusions by a kind of inspiration :—the philosopher, rather, is aware of those *principles* which, unknown to the artist, yet fill the springs of his thought. When a principle has appeared in any philosophic nature, as Number, Pythagoras, the Ideas in Plato, or the Categories in Kant, and has been recognised to require one form of existence, to reject its contrary (sect. 1) ; experience itself becomes in turn the object of an independent inquiry ; until principle and experience are re-united in the thought of the philosopher : to constitute for him a Being no longer subject to doubt, or opinion, but necessary, inevitable, and subject to chance.

358. The philosopher, therefore, having distinguished his principles, and opposed them to experience, and united them again with it, aims at reaching that kind of knowledge of the universe without which, although a man may be inspired, it cannot be wholly master of itself. His studies have, even in their imperfection, a very great value. "Theology and philosophy," says Berkeley, "gently unloose the ligaments that chain the soul down to the earth, and a man's flight towards the sovereign good." The high presentations of philosophy have thus a worth for the like that of painting, music and poetry (sect. 356).

359. It remains, finally, to speak of men whose nature is akin to those conceived by Leonardo in *St. Anne*, or by Dante in *Piccarda*, or in his *Philosopher* by Pico. They have in their lives made real these visions of philosophy and of art. So much of the World seems to have been revealed to their spirit (sect. 322), that to judge of the lives of these men may be itself considered a gift in man. Love, which unites others to scattered and random objects, holds these men to all things, and makes evident to them the fulfilment of these things of their own being. Love unites them with objects of *Nature* (sect. 130) : it has been said of St. Francis

